Presented by:

GreatWest ENGINEERING

Capital Improvements Plan Update

CITY OF THREE FORKS

August 2024

Client Commitment *Empowered Employees* *Quality Solutions*

CITY OF THREE FORKS

Capital Improvements Plan

August 2024

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Prepared for: City of Three Forks
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Adopted by Resolution #427-2024

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EXECUTIVE SUMMARY

The essential components of this Capital Improvements Plan (CIP or Plan) include the identification of public facility needs or projects; evaluation and prioritization of projects; and the development of cost estimates, funding approaches, and schedules. Ultimately, the plan is intended to ensure the City is positioned to:

- improve its 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 lifecycle of the facility or equipment;
- identify and examine current and future infrastructure needs and establish priorities among projects so that available resources are used to the community's best advantage;
- improve financial planning by balancing needs and resources and identifying funding options; and;
- develop an implementation schedule for prioritized projects.

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

The City of Three Forks retained Great West Engineering to assist in preparing the CIP. The City staff, Mayor, and City Council worked with the staff from Great West Engineering to identify needed projects and estimate associated costs. The CIP was funded through planning grants received from the Montana Department of Commerce Community Development Block Grant Program (CDBG) and the Montana Coal Endowment Program (MCEP), in conjunction with local funds.

The individual projects identified in this plan were evaluated by the City with a view to long-term objectives and how they relate to each other. The evaluation resulted in a list of the highest capital improvement priorities as determined by the City Council in consultation with City staff and residents.

INTRODUCTION

This Capital Improvements Plan (Plan or CIP) applies to all public facilities and infrastructure owned or maintained by the City of Three Forks including a drinking water system, wastewater collection and treatment system, stormwater system, transportation system, City park facilities, public buildings, maintenance facilities, and equipment. This CIP also addresses existing infrastructure and future projects related to flood hazard mitigation. The CIP describes the necessary projects required to maintain what currently exists, projects to upgrade or repair necessary assets, and projects needed to support growth that may be funded by impact fees. Additionally, the CIP presents budgetary costs and recommendations to help guide the City Council in identifying viable funding sources for its infrastructure needs.

What is a Capital Improvements Plan & Why Have One?

This Plan is a blueprint for identifying the City's capital needs, priorities, estimated costs, and viable funding options. The objective of the CIP is to create a logical, transparent, data-driven strategy for investing in the City's infrastructure needs. The Plan strives to reflect the priorities of City residents and to exemplify sound financial practices.

The CIP process consists of the following general steps:

- Inventory and evaluation of infrastructure, facilities, and equipment.
- Consideration of future growth and infrastructure required to support that growth.
- Advice and guidance from residents on priorities.
- Prioritization of needs.
- Identification of funding options to meet the needs.
- Matching funding sources with improvements; and
- Formal adoption and use by the City Council.

A significant goal and benefit of the CIP is to ultimately save the City's financial resources. Planning for long-term improvements with identified funding strategies helps a community stay on top of needed replacements or repairs before potentially catastrophic events occur within the City's infrastructure. Additionally, the City can implement guidance within the CIP to apply for grants and loans for improvements.

The CIP development process also makes capital expenditures more responsive to the needs of residents by informing and involving them in the process. Overall, the CIP promotes transparency in financial decision making by informing residents of the City's overall responsibilities, greatest current deficiencies or needs, costs associated with those needs, and plans for improvements. If used and updated regularly, the CIP ultimately becomes a beneficial planning and budgeting tool for a governing body to manage their assets more efficiently and effectively.

Finally, the CIP provides supporting information for the development of impact fees by including projects that support future growth. Local governments can collect impact fees from new developments in order to pay for the cost to expand public infrastructure. Fees are calculated according to formulas which include the planned construction costs of improvements. The CIP may also support the City in negotiating off-site exactions at the time of annexation or subdivision.

Relationship to Other Planning Documents

When planning for capital improvements, it is important to consider and understand how capital expenditures relate to policies, regulations, and guidance provided in the City's other adopted planning documents. Planning for capital improvements requires consideration of the other adopted plans to ensure compatibility and application of consistent design criteria and assumptions.

Envision Three Forks – The City of Three Forks has adopted a growth policy known as Envision Three Forks. A growth policy generally provides direction for how and where a community should develop and guides land use outcomes. The growth policy is a significant tool for communities to implement as a key first step in an effort to ensure growth occurs in an orderly, logical, and cost-effective manner. Envision Three Forks presents a future land use map that illustrates land use categories both within the City limits and adjoining area outside of City limits. The future land use map is provided in Appendix A. In general, the land use plan can be summarized by continued residential and commercial infill of vacant land within the City, two substantial future residential areas to the northwest and southeast of the City, mixed use development between residential and commercial areas, industrial areas to the north and south of the City, public parks and open space throughout, and designated agricultural areas on the peripheries of the land use planning area. Through incorporation of projects needed to serve growth, the CIP provides the background for discussions with developers and helps establish the basis for impact fees.

Envision Three Forks also identified several strategic action plan items as part of implementing the growth policy of which Priority 3 is to develop a CIP that identifies needed infrastructure improvements and timelines for improvements. Furthermore, the CIP can help implement other strategic action plan items of the growth policy by providing a mechanism to appropriately budget for those items. Therefore, it's important for the CIP process to consider and be in line with a communities' growth policy.

Subdivision Regulations – The City of Three Forks also maintains subdivision regulations that control and guide how parcels of land are divided into developable lots and how those lots are designed and laid out. While the growth policy provides direction for where a community should grow, the subdivision and zoning regulations provide direction for how the community should grow. Subdivision and zoning regulations typically provide guidance for development and "build-out" densities. The build out density is the total number of buildings that can be built if all vacant land is developed at the maximum density allowed per the regulations. As such, the build-out density directly relates to capital improvements planning by determining how large future public facilities need to be based on the build-out.

Standards for Design and Construction – The City of Three Forks has established design criteria relating to public infrastructure improvements to ensure quality infrastructure is installed that meets the City's requirements. Adherence to the standards ensures appropriate assumptions are made in design and quality materials are used in construction. These criteria directly relate to capital improvement planning for growth and cost assumptions.

The CIP and other planning documents all work together to assure that growth occurs in a manner that is sustainable and consistent with the vision for the community. If the established plans are followed, the community is equipped with tools to guide growth rather than react to growth. While the growth policy, subdivision regulations, and design standards provide guidance for where and how the community should grow, the CIP is the tool for establishing what the City

needs to do to maintain and grow its facilities, how much it will cost, when the improvements will likely occur, and ultimately establishes a budget and funding plan for the needed improvements.

Key Elements

The key elements of the CIP development process are summarized in the following table. Public outreach and involvement are elements that occur regularly throughout the process and are described in more detail within the next section.

Table 1 – CIP Development Process

Element	Description	Methods/Steps
Background Information	Gather general information on the community in order to describe the existing geography, physical features, land use, government structure, demographics, socioeconomics, trends, and current issues the community is facing.	• Review the City's existing growth policy and other planning documents. • Compile and evaluate Census data. • Interview local officials and City staff.
Inventory	Gather information on the City's infrastructure and assets. Describe each of the City's major systems/facilities. Describe the existing condition of each system/facility.	• Review previous studies, existing City data, inventories, and condition assessments. • Conduct site visits and interview City staff. • Conduct street pavement/surface analysis. • Assess whether existing infrastructure can serve projected population.
Analysis	Identify needs for each City infrastructure component and develop potential projects or future studies needed to address the needs. Develop project descriptions and associated preliminary cost estimates(1).	• Review previous preliminary engineering studies and include applicable projects. • Develop street surfacing remedies. • Conduct surveys to identify the public's needs. • Develop projects needed to serve growth.
Prioritization	Prioritize potential projects lists for each infrastructure category by identifying which projects should be completed first to address the most critical needs.	• Start with prioritization by City staff/officials. • Hold public meetings for project prioritization discussions. • Consider a range of factors in prioritization. • Refine prioritization as needed.
Funding	Identify and evaluate potential funding sources to finance proposed improvements.	• Analyze the City's existing funding sources and financial structure. • Research and identify outside current funding sources to finance certain improvements. • Match funding sources to improvement type.
Implementation	Develop a schedule for implementing improvements.	• Consider factors such as availability of funding, grant funding cycles and review periods, preliminary engineering, and planning requirements. • Tabulate improvements by year, cost, and funding source.
Adoption	Adoption of the CIP by the City Council.	• Adopt through resolution after a formal public hearing. • Incorporate the first year of CIP into the current annual budget. • Implement the identified projects in the CIP.
Update	Review and update the CIP on a regular basis as improvements are made and additional improvements are identified. The CIP should be a living document and used annually for budgeting for improvements.	• Develop and describe mechanisms for regular updates. • Update annually with budgeting process including cost accounting and reprioritization.

(1)Preliminary cost estimates for proposed improvements assume estimated budgetary unit prices. Due to the general nature of the analysis, these cost estimates are not accurate enough to be used as a definitive basis for establishing a specific improvement project's actual cost but are acceptable for budget-level estimates.

PUBLIC OUTREACH AND ENGAGEMENT

Outreach and engagement with City residents were an important part of the capital improvement planning process. The City actively provides opportunities for individuals within the community to engage in the decision-making processes that affect the public through regular City Council meetings (offered both virtually and in-person), Facebook, and website posts. The City maintained a project specific web page throughout the development of the CIP which included information such as a project timeline, project description and purpose, meeting dates, and other supporting information.

The City also undertook the development and marketing of an online and printed survey in March 2023 to ask residents for their input on capital improvement priorities. The survey was marketed on the City's Facebook Page, the City's website, and at the City Hall location. Printed copies were also available at the Senior Center, cafes, and food bank. Eighty residents responded to the survey. Survey results identified emergency services and drinking water as the highest importance to residents followed by the wastewater system, streets, and stormwater. The results of the public survey can be found in Appendix B.

A working draft of the CIP was presented to the City Council and discussed at meetings held on 3/12/24, 4/9/24, 6/11/24, and 6/25/24. A final draft version of the plan, based on input from the Council, was made available to residents on July 3, 2024. The plan was available as a download via the City website and printed copies were available at City Hall. The Council held a hearing on the final draft on July 9, 2024, and the Council formally adopted the plan by resolution at a Council meeting on August 13, 2024.

THREE FORKS AT A GLANCE

The City of Three Forks is located in southwest Montana in western Gallatin County, between the Madison and Jefferson Rivers. Three Forks was officially incorporated in 1911 and was an important hub for the railroad in its early years.

Perhaps one of the region's most defining features—and where Three Forks gets its name—is the nearby Missouri Headwaters State Park and Historical Landmark, where the Jefferson, Madison, and Gallatin Rivers merge to form the 2,300-mile Missouri River. Today, the 532-acre park serves as a habitat for much of the region's wildlife and offers an unparalleled natural landscape. Missouri Headwaters State Park provides campsites, tipi rentals, paved trails to points of historical interest and scenic beauty, and interpretive displays of the area's rich cultural and natural history. Along the rivers, popular activities can include floating, kayaking, canoeing, fishing, photography, and wildlife viewing.

Three Forks is situated along Interstate 90 which runs east and west across southern Montana. The City of Bozeman, which has experienced rapid growth in recent years, is located approximately 30 miles east of Three Forks. State Highway 287 is west of Three Forks running south towards Harrison and north towards Townsend. Montana Highway 2 parallels Interstate 90 and connects Three Forks to Highway 287 to the west. Land use within the City of Three Forks includes residential homes and commercial businesses in a gridded street pattern, with the area surrounding the City dominated by agricultural uses and a few residential homes. The topography surrounding Three Forks is relatively flat and generally slopes to the northeast towards the Missouri River headwaters. The ground directly west of the Jefferson River and US Highway 287 rises more dramatically into rolling hills. A higher ridge also exists south of Three Forks in between the Jefferson and Madison Rivers.

Three Forks is a relatively small town, situated in a part of Montana that is experiencing rapid growth. Historic populations for Gallatin County and the City of Three Forks are shown in Table 2. The 2020 population of Three Forks is listed as 1,989 according to the U.S. Census.

Table 2 – Historic Population Data

Year	Gallatin County		Three Forks	
	Population	Total Period Growth	Population	Total Period Growth
1990	50,463		1,203	
2000	67,831	34%	1,728	44%
2010	89,513	32%	1,869	8%
2020	118,960	33%	1,989	6%

Source: U.S. Census Bureau

Gallatin County and Three Forks have increased in population over the past 30 years. Gallatin County growth rates are much higher than Three Forks due to the cities of Belgrade and Bozeman which have both been growing substantially in recent years. Three Forks has experienced moderate growth over the past 20 years. Figures 1 and 2 depict the general location and key features of Three Forks.

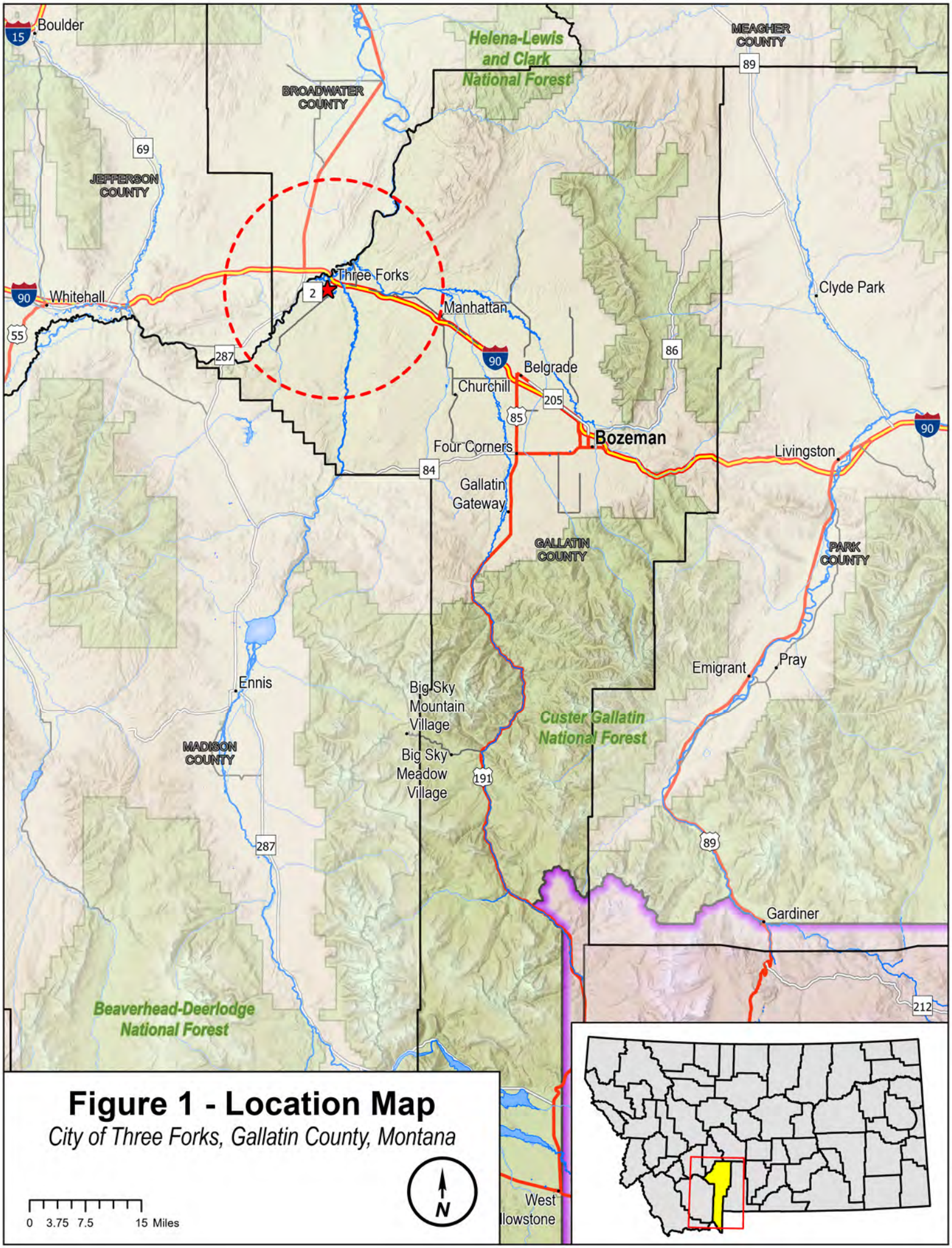
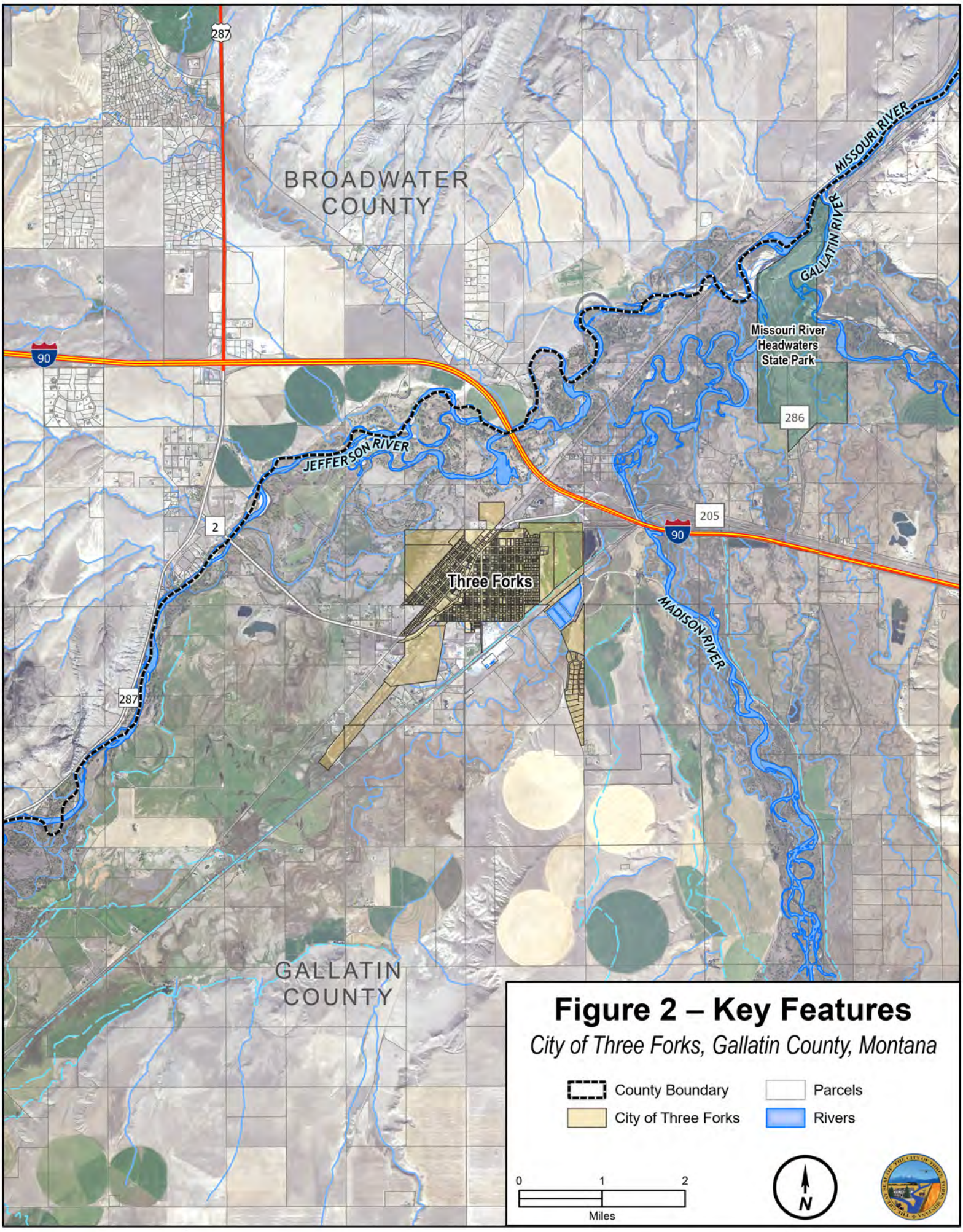


Figure 1 - Location Map

City of Three Forks, Gallatin County, Montana


BROADWATER COUNTY
GALLATIN COUNTY
MISSOURI RIVER
GALLATIN RIVER
JEFFERSON RIVER
MADISON RIVER
Missouri River Headwaters State Park
Three Forks
287
90
2
205
286
Figure 2 – Key Features
City of Three Forks, Gallatin County, Montana
County Boundary
City of Three Forks
Parcels
Rivers
0
1
2
Miles
N

Three Forks has generally seen much slower growth when compared to Gallatin County. The reasons for this can likely be attributed to a variety of factors including the fact that much of the land adjacent to Three Forks falls within the regulatory floodplain, a shortage of available building lots, and a limited water supply. Three Forks is actively working to address the water supply shortage and is also pursuing grant funding for a flood mitigation project that will remove much of the City and adjacent land from the floodplain. With these natural constraints lifted, it is reasonable to assume Three Forks will grow at a faster pace than historically observed. Another factor that is expected to contribute to future growth in Three Forks is the relative affordability of housing that currently exists in Three Forks as compared to home prices in nearby communities such as Bozeman and Belgrade.

Another area that has grown substantially over the past two decades is Broadwater County, located just northwest of Three Forks. The area has developed into residential subdivisions that contain large lots with homes served by individual wells and septic systems. Although these properties are not connected to Three Forks City water and wastewater, the area is putting pressure on City resources such as roads and facilities. The City does not receive any revenue from Broadwater County properties, but Broadwater County residents are using the City's facilities such as the library and parks, and streets are impacted by more traffic.

The population of Three Forks has a higher number of retirees as compared to Gallatin County as a whole. Age composition statistics also point to a high proportion of residents under the age of 19, which suggests Three Forks population is also highly comprised of young families. Most homes in Three Forks are single-family housing units built between 1980 and 2000, with a significant portion of homes also built prior to 1940. There are limited multi-family housing options.

Sacajawea Hotel and Bar

The majority of residents work outside of the area with a large percentage commuting to Bozeman for work. Three Forks is not a major employment center. Most local jobs in Three Forks are located along Main Street in the form of local shops and restaurants. Significant employers include Three Forks Schools and the Sacajawea Hotel and Bar. Additionally, there are a few employers located just outside of the City including a concrete plant and talc plant. Three Forks is surrounded by a number of farms and the agricultural heritage and economy are important to residents who wish to maintain the rural character of the area.

According to the 2015-2019 American Community Survey (ACS) 5-Year estimates, the median household income in the City of Three Forks is $65,357 and 5.8 percent of its residents live below the poverty level. The low to moderate income (LMI) percentage for There Forks is 45.3

percent. The LMI percent is based on the U.S. Housing and Urban Development (HUD) 2015 low- and moderate-income data.

The downtown area of Three Forks is vibrant, and the riparian habitat is a popular destination for fly-fishing and other water activities such as river tubing. Three Forks provides services for tourists and travelers as there are several recreational opportunities in the area, including two state parks. Three Forks is also the initial point of the Headwaters Trail System, a paved network of approximately 12 miles of trails extending from Three Forks, through Missouri Headwaters State Park, to the Droulliard Fishing Access Site located west of Three Forks.

The City operates under the Mayor-Council form of government, which is a City Council comprised of six representatives and the Mayor, all elected at large. The City provides municipal services to residents including drinking water, wastewater collection, transportation systems, parks, and other facilities. Each system and major group of assets will be discussed and evaluated within the following chapters. The City does not own or provide any solid waste or recycling facilities. Residents have the option of contracting with licensed garbage service providers in the area or hauling garbage to the nearby landfill providing it is hauled within the rules of the City's ordinance. Recycling is offered at a location within the City which consists of large collection containers for cardboard, plastics, paper, and aluminum. Containers are provided and serviced by a local recycling company that is associated with the County landfill. The City provides the land for the containers at no charge to the recycling company.

Growth Projections and Buildout Analysis

As briefly summarized above, Three Forks can be expected to grow in population. Capital improvements planning should give thought to the needed infrastructure improvements to serve that growth so that appropriate impact fees may be collected from new developments. In order to assess the impact of future growth on infrastructure, the first step is to determine how much growth to plan for.

Three Forks has recently completed its growth policy. Envision Three Forks presents a future land use map that identifies future growth within four main areas within and surrounding Three Forks. These are:

- Residential Infill – Development of existing vacant lots within the City into single-family and small multi-family housing units.
- Northwest Residential – A 92-acre parcel of land within City limits that will open up to growth with the anticipated construction of the Jefferson River flood mitigation project.
- Southeast Residential – A 400-acre parcel of land southeast of the City limits.
- Commercial Infill – Development of existing vacant or underutilized properties within downtown Three Forks and the adjoining highway corridor. This infill assumes residential dwelling units will be constructed above ground floor commercial units.

A buildout analysis of the above growth areas was conducted by a land use planning consulting firm, concurrent with the development of this CIP. The analysis resulted in three future population scenarios based on varying development densities. Total growth populations based on buildout densities of the growth areas results in future growth ranging between approximately 2,800 to 6,300 additional people. When the growth populations are added to the existing population of Three Forks, total population ranges from approximately 4,800 to 8,200 people. The full buildout analysis report can be found in Appendix C. The following chapters of the CIP will evaluate each infrastructure system in terms of adequacy to support the assumed buildout.

Table 3 – Buildout Analysis

Growth Area	Population		
	5 DU/Acre	7.5 DU/Acre	11.5 DU/Acre
Residential Infill	155	155	155
Northwest Residential	350	524	804
Southeast Residential	2,279	3,419	5,242
Commercial Infill	52	52	52
Total Growth	*2,836*	*4,150*	*6,254*
Existing Population	1,989	1,989	1,989
Total Population	4,825	6,139	8,243

Source: Lee Nellis, FAICP

WATER SYSTEM

The water system in Three Forks consists of multiple groundwater wells, two water storage tanks, an arsenic water treatment plant, and a distribution system made up of various types and sizes of pipe. An overall view of the system layout is shown in Figure 3.

Source/Supply

The drinking water source for Three Forks is provided by groundwater wells located in and near the City. The wells have varying capacities and are used at different times depending on the quality and capacity of each. Some of the system's wells are quite old and have required maintenance in recent years. All of the pumps are relatively new, and most of the wells have been cleaned within the last five years. The City's drinking water system complies with water quality standards for safe drinking water although some wells produce water with aesthetic issues (taste, odor, etc.)

A water system preliminary engineering report (PER) was prepared in 2020 and identified the City needs additional supply capacity to meet existing and future demands. Three Forks is faced with the unique situation of being relatively surrounded by water due to its location at the headwaters of the Missouri River, but at the same time encountering difficulties in locating high-quality groundwater sources. Wells near the Madison River require treatment due to arsenic, and wells located nearer to the Jefferson River are generally safe to drink but contain constituents that may cause the water to be unaesthetically pleasing.

The City is currently working to develop additional public water supply wells and intends to discontinue use of the wells with aesthetic issues if new higher quality water wells are discovered. Table 4 summarizes the water supply condition as it currently stands with respect to additional supply needed to serve the proposed growth areas. Three Forks currently has lower than normal per capita water usage as compared to other communities because most homes use individual sandpoint wells for irrigation. As a result, the existing average gallons per capita per day number is 74 and the peak day to average day ratio is 2. For conservatism, the growth area projections assume 100 gallons per capita per day water usage and a peak day to average day ratio of 3 which are standard assumptions for domestic water usage that include irrigation. As the future development patterns migrate to more high-density development within the growth areas, the use of sandpoint wells may be become less practical and cannot be guaranteed. Under the assumptions as shown in Table 4, the City's existing supply cannot adequately serve the proposed buildout at any of the proposed buildout densities noted in the buildout analysis reflected previously in Table 3.

Although the full buildout density cannot be served by the existing supply, the existing supply can support some growth. The City has the current source capacity to serve somewhere between 650 and 1,100 additional people or approximately 23 to 39 percent of the future population resulting from the lowest buildout density scenario. If the City and/or developers would like to continue exploring development of water supplies for Three Forks, a larger water supply study is recommended to potentially explore other alternatives for supply development and consider a larger planning area. For cost considerations and planning for the future, the City's current well drilling and development project cost is approximately $1.4 million for the development of two wells estimated at 250 gpm each. This cost could be inflated and applied to future groundwater exploration and development projects for additional groundwater supply capacity. A larger water supply study could also look at a surface water source as another potential supply option.

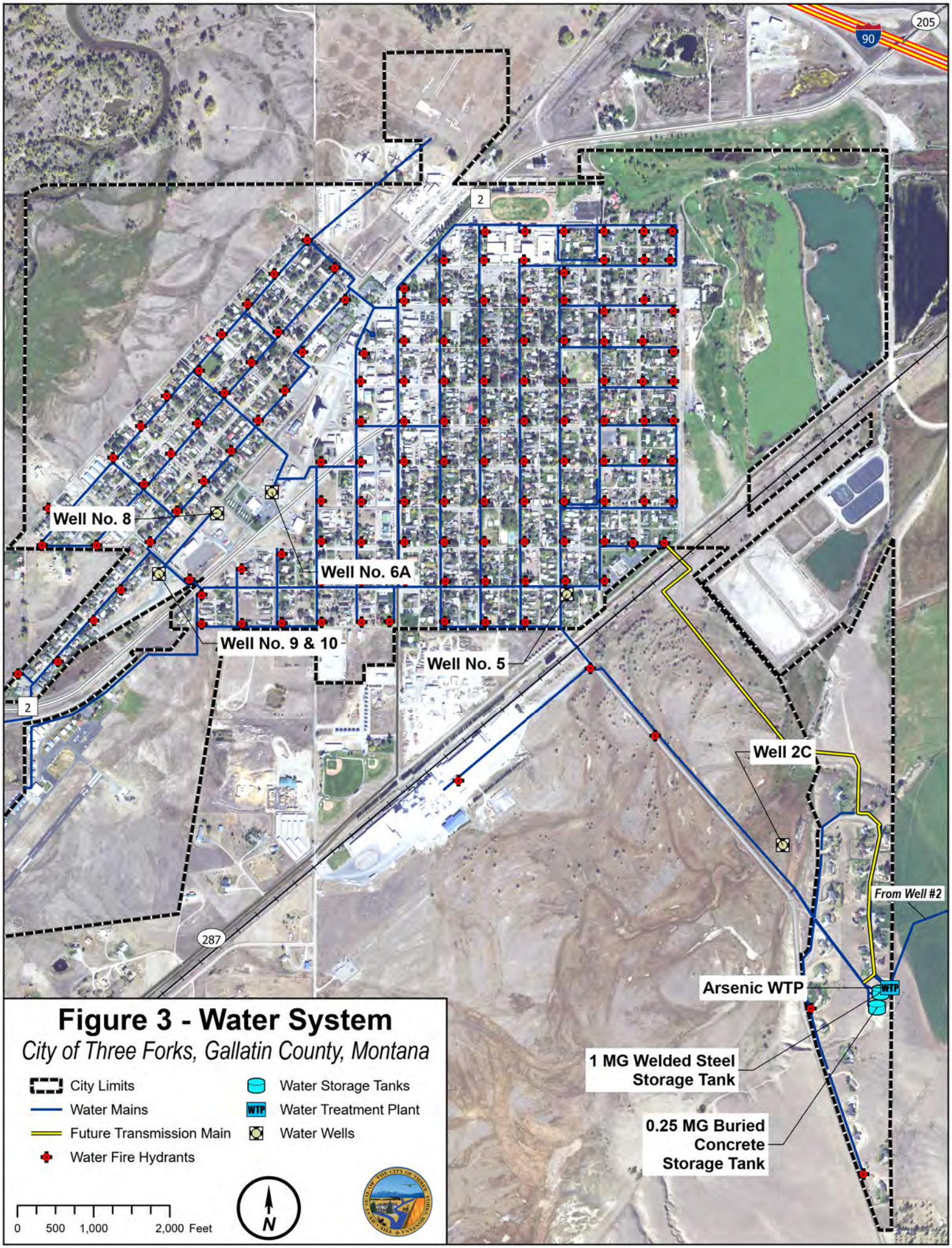

205
90
2
Well No. 8
Well No. 6A
Well No. 9 & 10
Well No. 5
2
Well 2C
From Well #2
287
Arsenic WTP
WTP
1 MG Welded Steel Storage Tank
0.25 MG Buried Concrete Storage Tank
Figure 3 - Water System
City of Three Forks, Gallatin County, Montana
City Limits
Water Mains
Future Transmission Main
Water Fire Hydrants
Water Storage Tanks
Water Treatment Plant
Water Wells
0
500
1,000
2,000 Feet
N

Table 4 – Water Supply Summary

Water Use Parameter	Buildout Scenario		
	5 DU/Acre	7.5 DU/Acre	11.5 DU/Acre
Existing Population	1,989	1,989	1,989
Existing Average Day Demand (gpm)[1]	102	102	102
Existing Peak Day Demand (gpm)[2]	205	205	205
Growth Population	2,836	4,150	6,254
Growth Average Day Demand (gpm)[3]	197	288	434
Growth Peak Day Demand (gpm)[4]	591	865	1,303
Total Peak Day Demand (gpm)	796	1,070	1,508
Existing Firm Well Capacity (gpm)[5]	390	390	390
Supply Deficit (gpm)	-406	-680	-1,118

[1]Based on 74.2 gpcd
[2]Based on a peaking factor of 2
[3]Based on 100 gpcd.
[4]Based on a peaking factor of 3.
[5]Based on production of well #5, well #6A, well #2C (estimated), well near tank, with the largest well (well #2) out of service per DEQ.

Treatment

Three Forks disinfects its water supply with chlorine which is injected at the wellhead of each well. One well is treated for arsenic through an arsenic treatment plant located near the existing water storage tanks. The water treatment plant is well maintained and consistently produces water which meets the necessary standards.

Expansion or reconfiguration of the existing water treatment plant may be possible should the City require additional treatment capacity. Based on the existing use of the treatment facility for the one well alone (well #2), it is not necessary to expand or reconfigure the plant. However, should another well in the vicinity ever be constructed, brought on-line, and require arsenic removal, it may be possible to expand the capacity of the existing plant.

Arsenic Treatment Plant

Storage

Three Forks has two storage facilities used for potable water storage. The primary water tank is a 1-million-gallon welded steel tank. The tank was constructed in 1986 and is in good condition. If the City continues to recoat this tank as needed, the tank can be expected to last another 20 to

40 years. The secondary water tank is a buried concrete tank that has a capacity of 250,000 gallons and was constructed in 1916. The concrete tank was rehabilitated in 2016 with a reconstructed roof and interior coating. Buried concrete tanks can have a life of over 100 years. With the rehabilitation project, the concrete tank is in good condition.

Table 5 summarizes the water storage sizing evaluation with respect to serving the proposed growth areas and buildout densities. The current storage volume in Three Forks is likely adequate to serve the proposed growth at low, medium, and high-density buildouts.

Table 5 – Water Storage Summary

Storage Parameter (gallons)	Buildout Scenario		
	5 DU/Acre	7.5 DU/Acre	11.5 DU/Acre
Storage Needed for Existing Demand	150,000	150,000	150,000
Storage Needed for Future Demand	280,000	420,000	630,000
Storage Needed for Fire Flow(1)	300,000	300,000	300,000
Total Storage Required	730,000	870,000	1,080,000
Existing Storage Available	1,250,000	1,250,000	1,250,000
Storage Surplus	520,000	380,000	170,000

(1)Based on 2,500 gpm for 2 hours.

Distribution

The water distribution system for Three Forks is made up of a variety of pipe materials and sizes, including ductile iron, asbestos cement, and PVC pipe with sizes ranging from 4-inch to 10-inch. The distribution system is in good condition and does not experience catastrophic breaks or leaking lines. A program of line rehabilitation and hydrant replacement has been ongoing in the City for many years and has resulted in the replacement of old lines, upgrading all of the old fire hydrants, and looping many of the dead-end lines. Most of the water lines in the old part of the City are 6-inch cast iron which were installed in the 1910s and will eventually require total replacement.

1-Million Gallon Welded Steel Water Storage Tank

Overall, the distribution system experiences moderate pressures due to the elevation of the storage tank relative to the mean elevation of the City. Pressures in the system

generally range from about 80 psi to 90 psi throughout the City. The majority of the system has available fire flows in excess of 1,000 gpm. There are a few areas needing improved fire flows which are currently being addressed with a water main replacement and installation project that further loops the system to improve flows. This project is located in central Three Forks between East Neal Street and East Elm Street and 2nd Avenue East and 4th Avenue East. The project is currently in the design phase and will be constructed in 2024.

The City currently has meters on all service connections (with the exception of a couple irrigation services). The meters have radio read capability and are read by operators as they drive on City streets. A radio signal conveys the reading to a data collector in the truck. The data collector is downloaded to a computer in the City Clerk's office and invoices are generated.

The water distribution system is currently fed via one single 10-inch PVC transmission main originating at the storage tanks southeast of the City and following Kyd Road until connecting into the distribution system at the intersection of 4th Avenue East and East Ivy Street. The City has been planning for a redundant transmission main for several years in order to foster a resilient system and improve fire flows. As the buildout density is considered, the transmission system in Three Forks will need to be sized to carry approximately 800 to 1,500 gpm to account for peak day domestic demand plus another 2,500 gpm for fire flows. Therefore, the system will need to be able to deliver up to 4,000 gpm.

The City has developed a preliminary alignment of the transmission main through conversations with the southeast growth area developer. The future transmission main alignment is shown in Figure 3. The City's water system hydraulic model will need to be updated and the transmission main alignment evaluated in order to realize the hydraulic benefits to the system and whether additional main improvements are needed within the City in order to adequately serve the northwest growth area. The system within the City is fairly adequately looped and it may be that minimal to no additional improvements are needed. There are no pressure concerns with serving any of the growth areas as the storage tanks are situated at an adequate elevation to serve the system with suitable pressures.

Water System Needs and Future Projects

The following projects are identified as priorities in order to maintain, repair, improve, and plan for future needs of the drinking water system in Three Forks. Detailed cost estimates are provided in Appendix D for select projects as necessary. Planning level costs are based on estimated consultant fees to complete applicable studies or estimated equipment and installation costs for smaller projects. A cost estimate for completion of a PER is provided in Appendix D. For planning purposes of this CIP, it is assumed the cost to complete an infrastructure PER is the same regardless of system type. For larger construction projects, costs are based on similar constructed project unit prices and include design engineering, construction engineering, 20% contingency, and an estimate for inflation.

Water System PER/Master Plan: The last water PER for the Three Forks water system was completed in 2020. The PER focused heavily on supply and treatment alternatives and the recommended project that was presented and funded by state grants was the water supply investigations that are currently on-going. The 2020 PER did not focus closely on alternatives for the transmission or distribution elements of the system. It is recommended the City pursue a water system PER or water master plan in the next five years to focus more on the transmission components and the improvements that will be needed to deliver water to Three Forks with the anticipated buildout growth. The PER will include an update to the City's water system hydraulic

model and will also further study and determine what remaining cast iron pipe remains in the system that requires replacement. Because this PER would in part evaluate improvements needed for growth, a portion of the PER could likely be paid for with impact fees. The estimated consultant fee to complete a water system PER is currently $80,000. In order to allow time for the City's current water supply project to be constructed and in use for a few years, it is estimated a water PER could be initiated in 2027 and used to apply for state construction grants in 2028.

Water Main Replacements: The City has been working on water line replacement for many years, however, there are still water lines in the old part of the City that are 6-inch cast iron which were installed in the 1910s and will eventually require total replacement. The current status of the system does not suggest the old pipes are failing imminently; however, it will be an issue to be addressed in the coming years or if breaks and leaks increase significantly. It appears the City will have approximately 20,000 lineal feet of cast iron remaining in the system after the 2024 water distribution project that is replacing some cast iron lines as well. The replacement of the 20,000 lineal feet will likely be constructed in phases spread out over two or three different projects. The City could expect to complete one phase of cast iron replacement within the next five years. Assuming one phase is approximately 5,000 lineal feet of replacement, the estimated cost for one phase is approximately $3.0 million. The primary purpose of this project is to replace infrastructure that has outlived its useful life and reduce system leakage. A water main replacement project could be designed in 2029 and constructed in 2030 as an outcome of the 2027 water PER and state grant applications.

Transmission Improvements: This project includes construction of a second water transmission main to provide system redundancy, improve fire flow, and support serving additional growth in the system. The proposed transmission main route is shown in Figure 3. The route begins at the existing storage tanks, follows an existing street alignment through the Ridgeview Subdivision along Colter Trail, and then traverses across a portion of the southeast growth area to connect into the existing distribution system at the intersection of 7th Avenue East and East Grove Street. The City currently has funding for the design and construction of the transmission main along Colter Trail which is approximately 2,200 lineal feet. This project will likely be designed and constructed in 2024 and 2025. The estimated cost to design and construct the remaining 3,200 lineal feet of transmission main is approximately $1.4 million. The new transmission main will benefit the entire City of Three Forks by fostering a more resilient water utility as well as improving overall system fire flow availability. The new transmission main will also support additional growth within the City and the growth areas by adding more transmission capacity to the system. The timeframe for construction is estimated in the year 2026, although the ultimate schedule will depend on funding and coordination with the developer of the southeast growth area.

WTP Chemical Feed Pumps and Valves: This project will replace pumps and valves within the arsenic water treatment plant that require replacement due to age. Replacement of these parts is necessary as a routine operation and maintenance requirement to keep the system reliable and functioning. The estimated cost for the replacement parts is approximately $40,000.

WTP Media: This project will replace the filter media within the arsenic water treatment plant. Replacement of the media is required every seven to 10 years and the public works director has noted the media will need to be replaced within the next five years. The media was last replaced in 2019 for a cost of around $16,000. Assuming an allowance for inflation since 2019, the estimated cost for the media replacement is approximately $22,000.

Well Pump and Motor Replacement: This project will purchase and replace one well pump and motor for one existing water supply well within the system. Pumps and motors should be replaced every 15 to 20 years. The estimated cost for the replacement of the well pump and motor is approximately $15,000.

Lead Service Line Replacement: The EPA released the Lead and Copper Rule Revisions (LCRR) in 2021 which requires that all public water systems complete a water service line inventory by October of 2024. Any service lines identified as lead, galvanized iron/steel, or unknown prompt a notice sent to customers. Three Forks has completed the inventory and has identified approximately 150 service lines that are currently classified as galvanized, lead, or unknown (primarily galvanized and unknown). The EPA released the proposed Lead and Copper Rule Improvements (LCRI) in 2023 which has not been finalized yet. The LCRI requires replacement of all lead, galvanized, and unknows (if needed) by 2037. Service line replacement is classified as replacement of the service line from the water main all the way to the house, therefore encompassing the private side of the service line as well. The construction cost of service line replacement is approximately $15,000 per service based on recent bid tabs for this work. There is funding available through the Montana State Revolving Fund (SRF) program for service line replacement if a project can be identified and funding obtained prior to 2027. A project to replace 150 service lines is estimated at $2.25 million. If the City is able to identify the current unknown lines as non-lead, the project cost could be reduced significantly.

The following projects are identified as longer-term priorities for the City to consider over the next five years to ten years.

Leak Detection Program: As old cast-iron water mains are replaced over the next several years and the system is further studied, the City could consider implementation of a leak detection program if the amount of water lost in the system is verified to be greater than 10%. There are newer leak detection technologies emerging within the water industry that could be implemented in Three Forks such as free-swimming inspection devices that travel throughout the water system and collect data to identify leak locations or leak detection technology that is installed on strategically placed fire hydrant locations.

Water Supply Study: The source water capacity of the system will continue to be a concern as the community grows even with the City's current on-going water supply investigations. If the buildout scenarios do become a reality in Three Forks, a substantial amount of additional water supply would be needed to serve growth. Current efforts are promising with the quality of water generally good, but quantities are not to the level of serving a large growth population. A larger scale water supply study could further investigate options for water supply to Three Forks by considering a larger planning area and additional alternatives. Alternatives might include further groundwater investigations over a larger planning area, the feasibility of a surface water treatment plant, or implementation of water treatment technologies to treat the lower quality water found closer to Three Forks. The study should also consider water rights implications.

Table 6 summarizes the recommended water system projects over the next five to ten years along with the estimated fiscal year of completion. Potential funding sources are also listed, and the implementation section of this CIP provides additional details on funding.

Table 6 – Water System Project Summary

Project Name	Estimated Fiscal Year	Total Estimated Project Cost	Potential Funding Sources
Water PER/Master Plan[1]	2027	$80,000	Planning Grants, Impact Fees
Water Main Replacements	2030	$3,043,000	Construction Grants and Loans
Transmission Improvements[1]	2026	$1,375,000	Developers, Impact Fees
WTP Chemical Feed Pumps & Valves	2027	$40,000	Local Funds
WTP Media	2028	$22,000	Local Funds
Well Pump and Motor Replacement	2029	$15,000	Local Funds
Lead Service Line Replacement	2027	$2,225,000	Construction Grants and Loans
Leak Detection Program	>2029	Unknown	Local Funds, Other
Water Supply Study[1]	>2029	Unknown	Developers, Impact Fees, Other

[1]Denotes projects that are related to or needed to serve additional population in Three Forks.

WASTEWATER SYSTEM

The City wastewater system consists of gravity collection system piping that generally flows from south to north and southwest to northeast. The collection system discharges to a lift station located at the northeast corner of the City referred to as the Oak Street lift station. The lift station pumps wastewater to the treatment system located southeast of the City. The Ridgeview Subdivision is located south of the lagoon system and consists of gravity collection mains, a solids collection tank system, and effluent gravity mains that discharge into the treatment system.

The wastewater treatment system is located at the southeast end of the City of Three Forks and was upgraded in 2014-2015. The system is a complete mix/partial mix lagoon system and receives all flow from the Oak Street lift station and Ridgeview effluent gravity main. The major components of the treatment system are a headworks facility, complete mix treatment lagoon, two partial mix lagoons, polishing reactor for ammonia treatment, and UV disinfection. The system also includes surge basins for storage and drying of sludge. The system discharges to the Madison River approximately one-mile northeast of the lagoons via a gravity effluent main. The discharge is located downstream of the Interstate 90 bridge between the railroad bridge and the pedestrian trail bridge.

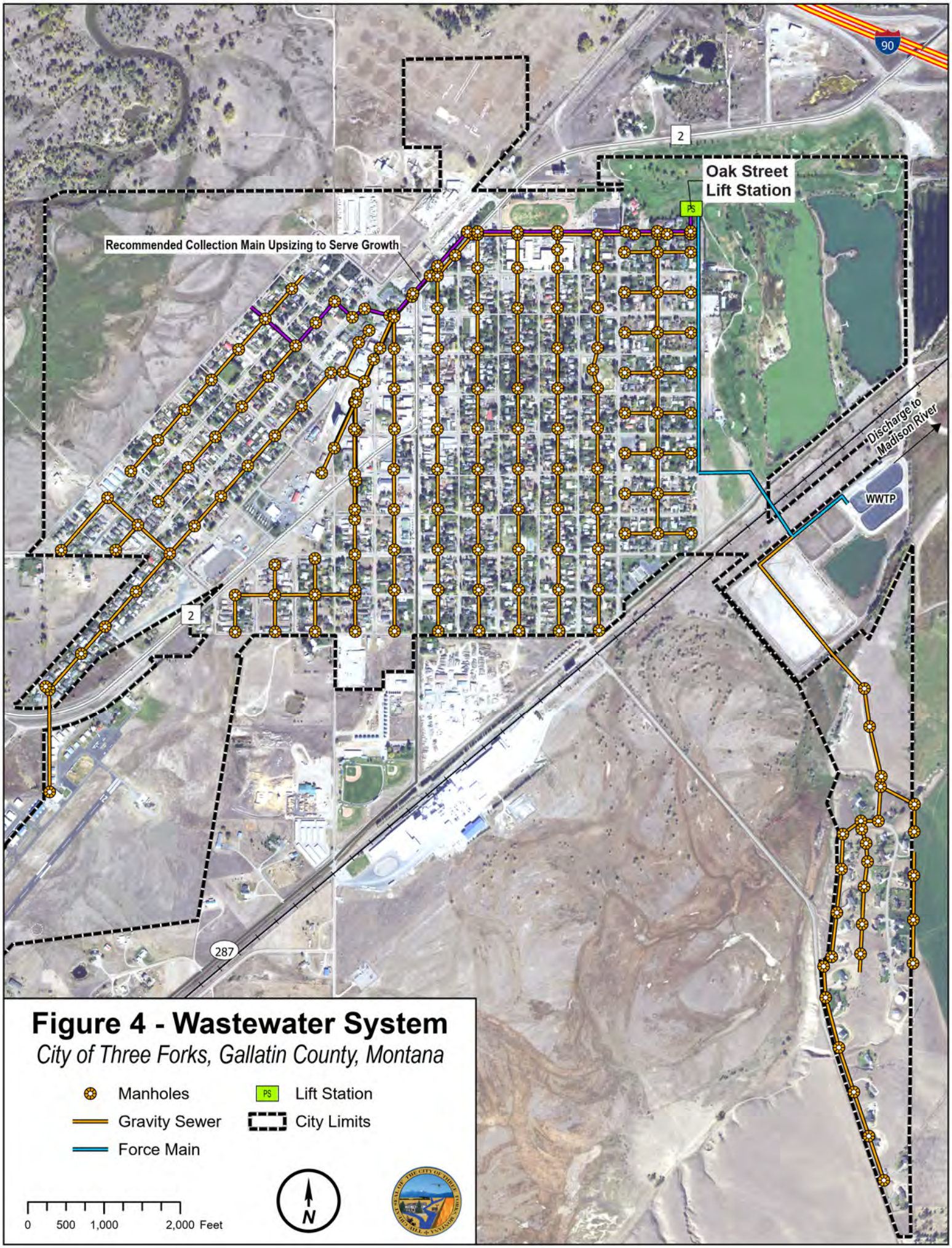
An overall view of the system layout is shown in Figure 4.

Gravity Collection Mains

The City's wastewater system was constructed in 1916 with clay tile pipe. The remainder of the pipe was added later and consists of asbestos cement and PVC pipe. The collection system is comprised mostly of gravity sewer mains ranging in size from 8-inch to 14-inch diameter. In 2006, approximately 21,000 lineal feet of pipe and 507 sewer service connections where rehabilitated with a lining project. During this project, 989 non-active service connections were eliminated from the City's system. The project likely cut peak summertime flows in half, according to the City's operator.

Although efforts have been made to reduce infiltration and inflow (I&I) through lining projects, many sewer services are still in need of replacement and the inflow and infiltration in the system is still high during high ground water. The City's collection system still has approximately 30,000 lineal feet of clay tile and asbestos cement pipe in the system. Identifying priority sewer services and collection mains to be replaced is essential for reducing I&I. The City's operator also believes there are several manholes in the north part of City that are not sealed that contribute to the I&I and need rehabilitation.

In terms of serving the projected buildout densities of the identified growth areas, an upsized sewer collection trunk main will eventually be required. The existing 14-inch diameter trunk main within Railway Avenue and Oak Street will need to be upsized to 16-inch (based on preliminary assumptions) and extended to serve the northwest growth area. The southeast growth area is located upstream of the WWTP and will likely not require connecting to the existing City wastewater collection system. The developer will likely install a trunk line and collection system throughout the southeast growth area that will discharge into the wastewater treatment system without affecting any existing collection mains within the City.


90
2
Oak Street
Lift Station
PS
Recommended Collection Main Upsizing to Serve Growth
Discharge to
Madison River
WWTP
2
287
Figure 4 - Wastewater System
City of Three Forks, Gallatin County, Montana
Manholes
Gravity Sewer
Force Main
PS
Lift Station
City Limits
0
500
1,000
2,000 Feet
N

Lift Stations and Forcemain

There are two existing lift stations in the City of Three Forks. The main lift station (Oak Street lift station) for the City is located at the northeast edge of City limits near the intersection of Oak Street and 7th Avenue and was constructed in 1982. The lift station is a wet well/dry well configuration with three centrifugal pumps. The lift station had controls upgraded in 2000, and the pumps were rebuilt in 2007. A single pump is designed to pump at a rate of 690 gpm. The City has indicated concerns over the age of the pumps. The actual lift station is over thirty years old.

The second existing lift station is a small lift station for the Ridgeview subdivision, located southeast of the main portion of the City. The station was built in 2015 as part of wastewater improvements. The system is a wet well configuration with two 1 horsepower pumps. Each pump can handle 150 gpm and conveys wastewater to the treatment facility via a 4-inch PVC forcemain. This system will not receive additional flow as the City develops to the southeast. The southeast development of the City will require a lift station to convey any new development's wastewater to the existing treatment facility.

Headworks Facility

The first unit process at the WWTP is the headworks facility which is a 24' x 34' masonry building that includes a control room, a sampling room, and a screening room. The screen room houses the incoming wastewater channel, screenings washer compactor unit, and the waste receptacle. The screen removes larger material and debris from the influent flow. There are no current issues with the headworks facility. The screen is adequate for future flows; however, the screen channel will likely require modifications to accommodate the additional flow from full buildout.

Treatment Lagoons

The City's treatment lagoons were originally constructed in 1960 as a single-cell facultative lagoon. Oxygen is provided to facultative lagoons through natural surface aeration and photosynthesis (no mechanical treatment processes). The system was updated in 1982 with the addition of two facultative lagoons and two infiltration/percolation cells. The 2014 construction project upgraded the treatment system to what it is today with the introduction of mechanical aeration which tappers aeration off through each lagoon. The upgraded lagoons have insulated covers that help maintain sewer temperatures to increase treatment efficiency which reduces the lagoon footprint.

Treatment Lagoons, Polishing Reactor, and UV/Blower Building

The intent of the 2014 treatment project was to address the most immediate, known permit and growth issues first and then allow for future phased upgrades as permit limits and treatment technologies evolve. The 2014 plant upgrades were based on a design population of 2,400 which is far under the growth predicted from the buildout analysis.

The treatment lagoon system is comprised of an insulated covered three cell system with one complete mix cell and two partial mix cells. The first pond provides biological treatment while the second and third ponds are primarily for settling but do provide some additional treatment. The current treatment technology is effective, and the City is able to meet the requirements of their discharge permit.

In terms of upgrades to accommodate future growth, the size of any upgrades to the wastewater treatment facility assumes the discharge permit for Three Forks will remain unchanged. As a result, all processes will have to be scaled in order to meet the organic loading limit in the effluent. Expansion of the system assumes the same processes will be utilized. There is adequate land available at the treatment site for future system expansion to serve the buildout densities. The available area is comprised of two abandoned lagoons that were used prior to the 2014 wastewater system upgrades. There are approximately 19 acres available at the treatment site and full buildout at the highest density would require a total treatment area of approximately 16 acres.

Polishing Reactor

The settling ponds are followed by a polishing reactor to treat for ammonia. The existing reactor footprint consists of a 37’ x 44’ concrete tank with aeration, 24 submerged attached growth media modules and an insulated cover. In order to meet the future wastewater flows, a total of 65 modules would be needed. A new reactor would be needed to supplement the existing infrastructure if full buildout densities occur.

UV Disinfection

Treated effluent is disinfected using open channel ultraviolet light prior to discharge to the Madison River. The system consists of one unit with multiple lamp modules. This facility is unable to meet the projected flows from the buildout density. In order to meet the projected flows, another facility of similar size is needed.

Wastewater System Needs and Future Projects

The following projects are identified as priorities in order to maintain, repair, improve, and plan for future needs of the wastewater system in Three Forks. Detailed cost estimates are provided in Appendix D for select projects as necessary. Planning level costs are based on estimated consultant fees to complete applicable studies or estimated equipment and installation costs for smaller projects. For larger construction projects, costs are based on similar constructed project unit prices and include design engineering, construction engineering, 20% contingency, and an estimate for inflation.

Wastewater System PER/Master Plan: The last wastewater PER was completed in 2012. Improvements from that project included upgrading the existing wastewater treatment facility to comply with DEQ and reduce environmental impacts. The wastewater treatment facility upgrades were constructed in 2014. A new wastewater PER is recommended in order to revisit the permit limits in conjunction with the anticipated growth of Three Forks. An updated PER is also needed to help the City further understand the inflow and infiltration (I&I) issues and

exfiltration issues of the wastewater system. An action plan will help the City address I&I which can result in unnecessarily high flow to the treatment plant. Because this PER would in part evaluate improvements needed for growth, a portion of the PER could likely be paid for with impact fees. The estimated consultant fee to complete a wastewater system PER is currently $80,000. The City currently has a planning grant from DNRC-RRGL to fund a portion of the wastewater PER so it is estimated a wastewater PER could be initiated in 2024 and used to apply for state construction grants in 2026.

Collection System Improvements: This project would replace, or line clay tile collection mains as determined by the PER. The project might also include sewer service line replacements and manhole rehabilitation. The estimated cost for collection system improvements is approximately $2.3 million assuming approximately 5,000 lineal feet of 8-inch PVC collection main replacement. Project costs would be determined in the PER based on how much remaining clay tile pipe is remaining and prioritized by the results of the infiltration and inflow assessment.

Upsize Collection System Trunk Main: This project would upsize the existing 14-inch diameter trunk main within Railway Avenue and Oak Street in order to serve anticipated growth from the northwest growth area and City infill. The preliminary estimate to upsize the existing 14-inch trunk line to 16-inch is $3.6 million. The schedule for this improvement is likely at least five years out or potentially longer. The development of the northwest growth area will depend on a variety of factors including when the Jefferson River flood mitigation project is built, and all regulatory implications of the floodplain have been lifted, as well as the developer's schedule. For now, the cost has been inflated to the year 2029.

Lift Station Upgrades: Lift station upgrades are needed to replace old pumps in the Oak Street lift station and rehabilitate the wet well that has outlived its life. Lift station upgrades would also include electrical modifications, a new backup generator, and new force main to the wastewater treatment plant. The lift station upgrades would be designed with the capacity to serve the northwest growth area and City infill. The preliminary cost estimate for lift station upgrades is $2.5 million.

Solar Panel System at WWTP: This project would install a solar panel system at the WWTP to improve energy efficiency at the plant for mechanical processes such as aeration equipment. The City has been in contact with solar panel companies and has gone through the process of obtaining a preliminary design and price. The preliminary cost ranges from $123,000 to $176,000 depending on the applicability of available tax credit incentives.

WWTP Expansion: This project would expand the wastewater treatment facility to serve future growth. Preliminary calculations have indicated there is likely adequate room to expand the lagoon system with additional ponds, polishing reactor expansion, and expanded UV disinfection. The plant expansion would be further studied in the wastewater PER. At this time, the estimated cost for a project to expand the WWTP to service future growth buildout is approximately $6.2 million assuming construction in year 2028. The schedule for this project will depend on future study of the system and the pace of growth within the community.

City-Owned RV Dump Station: The City wishes to install a City-owned RV dump station near the rodeo grounds on South Illinois Street. The benefits of an RV dump station are that it may bring people into the community who will stop and use facilities which may result in economic benefits to the City. An RV dump station may also eliminate illegal dumping in other parts of the City. The negatives of a dump station are increased operation and maintenance for the City. An RV dump station at the location on Illinois Street may also be problematic due to the proximity of

several water drinking water wells in the vicinity and obtaining approval from DEQ. Assuming the location is acceptable, and all proper precautions are taken to mitigate contamination of drinking water sources, it is recommended the City's dump station be designed to provide pretreatment and neutralization of chemicals before discharge into the collection system. The estimated cost to install an RV dump station at the proposed location is approximately $322,000. The cost estimate includes connection to the existing collection system on South Illinois Street, which is approximately 400 feet to the northwest.

WWTP Sludge Removal and Disposal: Sludge should be removed from the treatment lagoon system every five to seven years. Sludge has not been removed from the treatment system since it was installed in 2014. Sludge is removed by pumping with a barge pump system. The sludge is then discharged via hose to a location for sludge drying. Once the sludge has dried it is collected using a skid steer, loaded, and hauled to the Gallatin County landfill for disposal. The estimated cost for sludge removal and disposal is approximately $800,000.

Table 7 summarizes the recommended wastewater system projects over the next five to ten years along with the estimated fiscal year of completion. Potential funding sources are also listed, and the implementation section of this CIP provides additional details on funding.

Table 7 – Wastewater System Project Summary

Project Name	Estimated Fiscal Year	Total Estimated Project Cost	Potential Funding Sources
Wastewater PER/Master Plan(1)	2024	$80,000	Planning Grants, Impact Fees
Collection System Improvements	2028	$2,266,000	Construction Grants and Loans
Upsize Collection System Trunk Main(1)	2029	$3,563,000	Developers, Impact Fees
Lift Station Upgrades(1)	2028	$2,490,000	Construction Grants and Loans, Impact Fees
WWTP Solar Panel System	2025	$123,000	Local Funds, Other
WWTP Expansion(1)	2028	$6,171,000	Construction Grants and Loans, Impact Fees
RV Dump Station	2026	$322,000	Local Funds
Sludge Removal and Disposal	2028	$800,000	Construction Grants and Loans

(1)Denotes projects that are related to or needed to serve additional population in Three Forks.

STORMWATER

Inlet Drain

Stormwater runoff consists of water flowing over the surface of the ground because of rainfall or snow melting. The primary goal in the management of stormwater runoff is to minimize hazards to life and property. This is accomplished by using storm drains, ditches, and swales to collect and carry surface water to a natural water body course in such a way as to prevent flooding.

Three Forks lies within a valley setting, located between the Madison River to the east and the Jefferson River to the west. The topography surrounding Three Forks is relatively flat and generally slopes to the north and northeast with average slopes of approximately two to three percent. The ground directly west of the Jefferson River and US Highway 287 rises more dramatically into rolling hills. A higher ridge also exists south of Three Forks in between the Jefferson and Madison Rivers.

Stormwater in Three Forks generally flows to the north/northeast as overland flow. The majority of roads east of Main Street/MT Highway 2 are paved while roads west of Main Street are primarily gravel. Most streets do not currently have curb and gutter. The existing stormwater system in Three Forks consists of approximately 160 inlet drains located throughout the City at specific intersections, primarily within the roads east of Main Street. The inlets are equipped with perforated laterals that allow stormwater to infiltrate into the ground. The City maintains the inlet drain system through yearly inspection and cleaning. Rehabilitation is needed occasionally as the drains become plugged in with tree roots. Ice, mud, and debris can also be problematic and requires the drains to be cleaned more frequently by the City. There is no stormwater pretreatment occurring prior to infiltration into the ground and there is the potential for the inlet drain system to introduce contaminants into the surrounding area.

There are areas within the City with particularly poor storm drainage that are prone to ponding and flooding such as near the school and on East Neal Street. The City would like to improve storm drain collection and eventually have a complete City-wide storm drain collection and treatment system.

The City’s current lack of an existing stormwater collection system may limit future development in Three Forks. Maintaining all runoff on site may result in the requirement for large retention ponds that may be infeasible and unsafe to maintain and limit development within the growth areas. Planning for a future stormwater system that can accommodate future growth will give developer’s more options for discharge and promote a future system that is in line with the City’s design standards.

Stormwater System Needs and Future Projects

The following projects are identified as priorities over the next five years to plan for future needs of the stormwater system in Three Forks.

Stormwater PER/Master Plan: To better understand and address needs related to a future stormwater collection system in Three Forks, it is recommended the City pursue planning grants for completion of a stormwater PER/master plan. This PER will help the City identify the most effective and efficient ways to manage stormwater within the City as well as accommodate stormwater from future development. Investment in a stormwater PER allows the City to take an important first step to plan for a system that is safe, reliable, and sustainable. An updated stormwater infrastructure plan was also identified in Envision Three Forks as a priority. The estimated cost to complete a stormwater system PER/master plan is currently $80,000.

Subdivision Regulations Update: As also identified in Envision Three Forks, the City wishes to incorporate and promote the use of low impact development (LID) techniques into the City's subdivision regulations and design standards. LID technology can be incorporated through the use of green infrastructure for stormwater infiltration and the reduction of impermeable surfaces. The City will be undertaking an overall update to their subdivision regulations, starting in 2024 so the LID stormwater guidance is expected to be incorporated at the time of the overall update. The estimated cost for the full subdivision regulations update (including stormwater recommendations) is $90,000.

Table 8 summarizes the recommended stormwater system projects over the next five years along with the estimated fiscal year of completion. Potential funding sources are also listed, and the implementation section of this CIP provides additional details on funding.

Table 8 – Stormwater System Project Summary

Project Name	Estimated Fiscal Year	Total Estimated Project Cost	Potential Funding Sources
Stormwater PER/Master Plan(1)	2026	$80,000	Planning Grants, Impact Fees
Subdivision Regulations Update(1)	2024	$90,000	Planning Grants, Local Funds

(1)Denotes projects that are related to or needed to serve additional population in Three Forks.

TRANSPORTATION SYSTEM

The Three Forks transportation system includes streets, signage, signals, and multimodal features such as bike lanes, sidewalks, and trails. The transportation system serves residents, businesses, public agencies, visitors to the City, and motorists traveling through the area. The system provides efficient access to emergency services, essential needs, and recreation. It is important the City not only maintains the existing transportation system, but that it also makes improvements to the system to respond to the changing and developing needs of the users.

Streets

Figure 5 identifies the roadways within the City limits of Three Forks. Roadways are displayed according to functional classification which is a categorized system used to classify roads based on the type of service they provide. Arterials and collectors support mobility or “through” traffic whereas local roads focus on access and typically have lower travel speeds.

The transportation system within the City limits of Three Forks consists of mostly City-owned and maintained streets. There are two Montana Department of Transportation (MDT) routes in the City. Montana Highway 2 (MT-2) bisects the City from northeast to southwest and connects Three Forks to Interstate 90 (I-90) to the north and US Highway 287 (US-287) to the west. This section of MT-2 traverses Main Street and Frontage Road within Three Forks. Near the center of the City, at the intersection of Main Street (also MT-2) and Date Street, Montana Secondary 287 (S-287) originates and continues south via South Main Street connecting Three Forks to Willow Creek. Several routes on the outskirts of the City are owned by the County but have differing maintenance responsibilities.

The functional classification of all streets within Three Forks are local, except MT-2 which is a minor arterial and S-287 which is a major collector. Talc Road and Kyd Road are likely minor collectors for the County, but that is not confirmed. MDT is responsible for maintenance and improvement of MT-2 and S-287. The City maintains Talc Road from Kyd Road to MT-2 although it may be a County route. The County maintains Kyd Road from Talc Road to Colter Trail even though it accesses an isolated area within the City limits.

3rd Avenue East – Paved Road Example

The streets in Three Forks vary in terms of surface type and condition. In general, the streets west of Main Street are gravel-surfaced and the streets east of Main Street are paved. Some of the paved streets have curbs and gutters or decorative landscaping curbs, however, most streets lack effective stormwater conveyance such as curb and gutter, valley gutters, or roadside swales and ditches. Nearly all paved streets in Three Forks have received an asphalt overlay ranging in width from 30 to 50 feet in the past. However, the overlay does not extend all the way to the edges of the existing asphalt, often leaving two to eight feet of original asphalt on

each side. The overlayed portions of asphalt are generally in good condition and have been well-maintained with periodic chip seals. The areas of original pavement outside of the overlay are generally in poor condition with significant deterioration. There are minimal areas of subgrade failure or potholes.

The gravel-surfaced streets are generally in good condition. Very little wash boarding is present, and most streets have an adequate crown for drainage. Ponding is isolated and generally located outside the roadway. The streets appear to have an adequate quantity of gravel material placed on them to keep the street surface in good condition.

Dakota Street – Gravel Road Example

The City has adopted a very proactive maintenance program compared to similar sized cities. Although the infrastructure is aged and some maintenance was deferred in the past, the City is now maintaining the infrastructure on a regular basis which helps to ensure the infrastructure doesn't deteriorate to the point of needing complete replacement. The asphalt overlay and regular chip seals have preserved the pavement as evidenced by comparing it with the adjacent original asphalt. The City has aggressively patched potholes before they grew large or caused subgrade failure. Likewise, the gravel-surfaced streets do not exhibit ponding and wash boarding often found in small rural towns and cities in Montana.

As part of the CIP update, Great West Engineering completed a street assessment of roughly seven miles of gravel and 12 miles of paved streets throughout the City. This assessment involved evaluating the condition of each street based on the PASER (PAvement Surface Evaluation and Rating) Road Evaluation Criteria. The overall PASER Rating for each street was determined and used to rank each road based on condition. The roads were ranked from lowest to highest (1-10 for paved roads and 1-5 for gravel roads), with lower numbers indicating worse road condition(s).

The road evaluations assessed the condition of the pavement based on roughness, pavement strength, cracking, potholes, patching, and the general condition of the pavement. Gravel roads were evaluated in a similar manner using slightly different criteria. Gravel roads were rated based on crown, drainage, gravel layer, washboards, potholes, ruts, dust and loose aggregate, and ride quality. Appendix E contains all PASER field evaluation data sheets and map of PASER results. The PASER results indicate that 2nd Avenue East and East Birch Street are in the poorest condition in terms of paved roads. However, the majority of paved roads have ratings in the range of 7.3-8.6. Due to regular maintenance, gravel-surfaced streets are generally rated about 4.

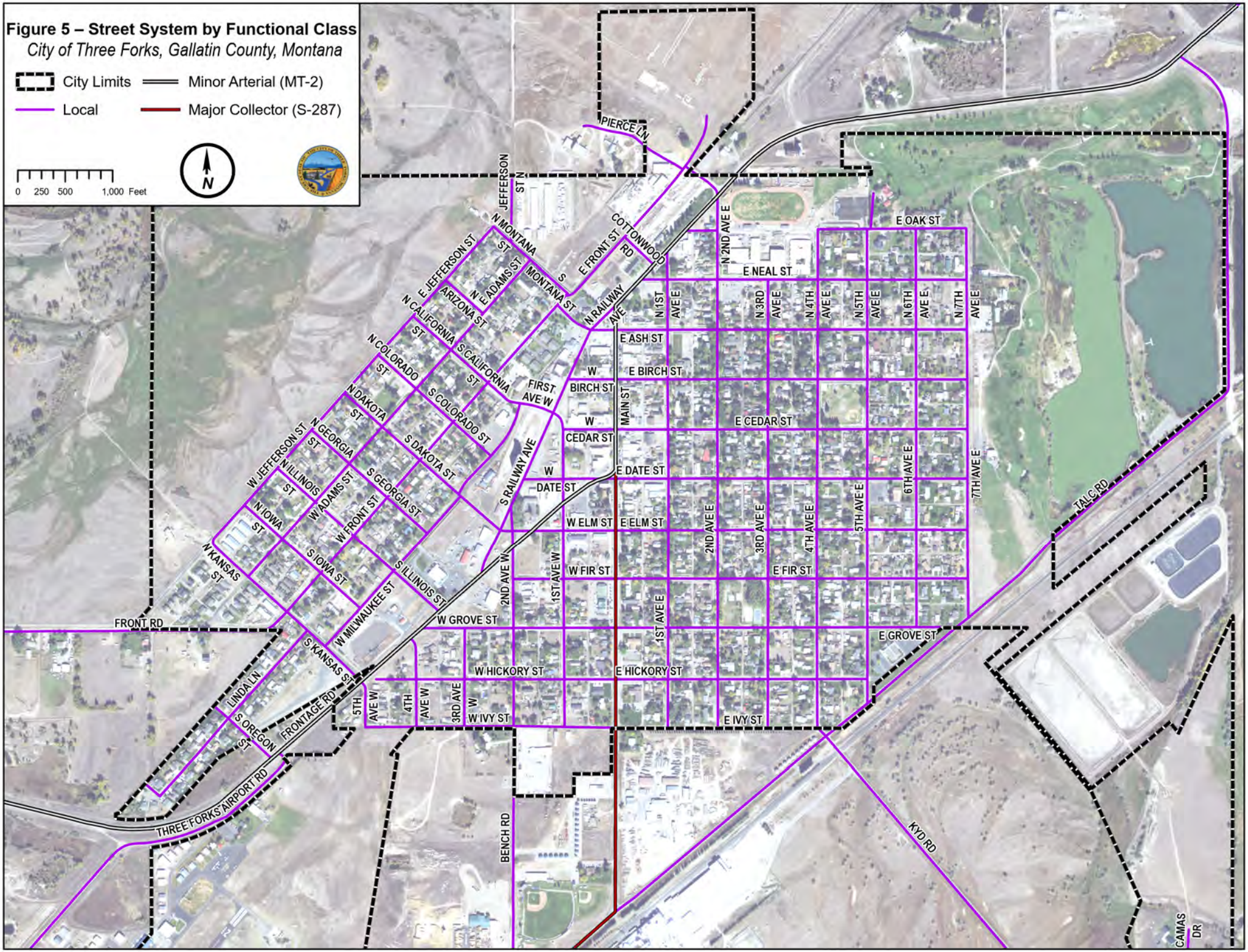


Figure 5 – Street System by Functional Class
City of Three Forks, Gallatin County, Montana
City Limits
Minor Arterial (MT-2)
Local
Major Collector (S-287)
0 250 500 1,000 Feet
N
PIERCE LN
JEFFERSON ST N
N MONTANA ST
E JEFFERSON ST
N E ADAMS ST
ARIZONA ST
MONTANA ST
S E FRONT ST
COTTONWOOD RD
N RAILWAY AVE
N CALIFORNIA ST
S CALIFORNIA ST
N COLORADO ST
S COLORADO ST
FIRST AVE W
N DAKOTA ST
S DAKOTA ST
W JEFFERSON ST
N GEORGIA ST
S GEORGIA ST
S RAILWAY AVE
N ILLINOIS ST
W ADAMS ST
N IOWA ST
W FRONT ST
S IOWA ST
S ILLINOIS ST
N KANSAS ST
W MILWAUKEE ST
S KANSAS ST
FRONT RD
LINDA LN
S OREGON
FRONTAGE RD
THREE FORKS AIRPORT RD
BENCH RD
KYD RD
CAMAS DR
TALC RD
W GROVE ST
E GROVE ST
W HICKORY ST
E HICKORY ST
W IVY ST
E IVY ST
W FIR ST
E FIR ST
W ELM ST
E ELM ST
W DATE ST
E DATE ST
W CEDAR ST
E CEDAR ST
W BIRCH ST
E BIRCH ST
E ASH ST
E NEAL ST
E OAK ST
MAIN ST
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Appendix E also includes a map and spreadsheet of City-wide overall proposed street improvement remedies based on the PASER evaluation. Numerous improvement measures for paved and gravel-surfaced streets were considered. Chip sealing and crack sealing were omitted because the City has a robust maintenance program that already includes these activities. The recommended improvement measures range from asphalt overlay to complete asphalt reconstruction. The recommended improvement for each street segment is based on the current surfacing type and condition.

When competent asphalt is present, such as in overlayed areas of Three Forks' streets, an asphalt overlay is an appropriate and cost-effective measure. One to three inches of new asphalt is placed directly on the existing asphalt providing added strength and structure to the street and improving the riding surface. When combined with pavement milling, an asphalt overlay can improve significant rideability and cracking issues, providing a quality of street approaching an asphalt reconstruction at a significantly reduced cost. Milling at the edges is also used to tie overlays into existing curbs and gutters. Overlays do not address subgrade failure areas or thin deteriorated asphalt that won't provide a solid base. For this study the following overlay types were recommended:

- Asphalt Overlay Type 1 – Asphalt overlay with no milling, used for streets without curbs and gutters.
- Asphalt Overlay Type 2 – Asphalt overlay with milling only along the edges to tie into curb and gutter.

Other improvement strategies recommended in Three Forks include:

- Asphalt Replacement – Removal of just the asphalt, recompacting, and re-paving. This measure is used for areas with deteriorated asphalt that isn't competent to overlay and that does not exhibit subgrade failure. Adequate base gravel needs to be present to provide a suitable base for the asphalt replacement.
- Digout and Asphalt Patching – Localized sawcut and replacement of base gravels and asphalt to correct subgrade failures. This can be used as a standalone measure or in preparation for an overlay or chip seal.
- Asphalt Widening – Full depth replacement of asphalt and base gravel with the purpose of widening an existing paved street or adding paved shoulders. An example of where this measure would be used is the areas outside of the existing asphalt overlay where the original asphalt has deteriorated to a condition that cannot be repaired or rehabilitated. When asphalt widening is complete, an asphalt overlay is often placed over the full width of the street to provide a uniform, new driving surface.
- Asphalt Reconstruction – Full removal of the existing surfacing section and full width placement of a new surfacing section. Reconstruction addresses widespread subgrade issues and complete deterioration of asphalt. For gravel-surfaced streets, the gravel surfacing material needs to be removed and replaced with free-draining aggregates for use under asphalt. However, the gravel surfacing material can be salvaged and used on other streets and parking areas. Asphalt Reconstruction provides a new quality street, but at a high cost.

Sidewalks and Trails

Sidewalks exist along Main Street and, on the north/south streets of 1st Avenue West, 1st Avenue East, 2nd Avenue East, 3rd Avenue East, and 4th Avenue East. Most of these sidewalks are original to the Three Forks Original Townsite plat and are in poor condition due to their age.

A multi-use paved trail network also runs throughout the City, known as the Headwaters Trail System. The trail system is a paved network of approximately 12 miles of trails extending from Three Forks, through Missouri Headwaters State Park, and to the Drouillard Fishing Access Site, located west of the City on the Jefferson River. There are plans to expand this trail network to Manhattan. Four trailheads are located within the City, and three others are located at the Three Forks Junction, inside Headwaters State Park, and just east of the City along I-90. Three Forks has an opportunity to build upon this trail system within City boundaries, connecting parks and neighborhoods.

Transportation System Needs and Future Projects

The following projects are identified as priorities in order to maintain, repair, improve, and plan for future needs of the transportation system in Three Forks. Detailed cost estimates are provided in Appendix D for select projects as necessary. Planning level costs are based on estimated consultant fees to complete applicable studies or estimated equipment and installation costs for smaller projects. Street construction projects are based on similar constructed project unit prices and do not include engineering, contingencies, or inflation. Future transportation system construction projects are illustrated in Figure 6.

Street Maintenance Master Plan: A street maintenance master plan would formalize the City's procedures and frequencies for maintenance activities such as chip sealing, crack sealing, gravel addition, and blading gravel streets. The estimated cost for consultants to incorporate this guidance into a comprehensive manual is $16,000, assuming approximately 80 labor hours.

Long-Range Transportation Plan: To better understand and address transportation needs related to future growth in Three Forks, it is recommended the City complete a long-range transportation plan (LRTP). This plan will evaluate existing and future traffic patterns and determine future road classifications. Once future road classifications are known, future improvements will be determined to accommodate additional capacity. An LRTP could also evaluate improvements needed for safety. For example, West Elm Street, 2nd Avenue West, South Dakota Street, South Railway Avenue, and Frontage Road all connect at an intersection within a roughly 100-foot area. Potential mitigations could include closing one entrance of two connections so that traffic can only meet at a "T" rather than the shape of a capital "A". A roundabout is another potential improvement at this location. The intersections currently serve low volume traffic, but safety issues should be examined through a detailed traffic study or incorporated as part of the LRTP, especially with the potential for growth in the community. The estimated cost to complete an LRTP is likely similar to what is required for completion of an infrastructure PER but would ultimately depend on the scope of work.

Bicycle/Pedestrian Master Plan: This project was identified in Envision Three Forks. A bicycle and pedestrian master plan would identify improvements needed to incorporate active transportation routes throughout the City and improve connectivity to existing trails. An active transportation master plan could be completed on its own or incorporated as part of an LRTP. The estimated cost to complete a bicycle/pedestrian standalone master plan is $30,000, assuming approximately 150 consultant labor hours.

Growth Related Street Improvements: As identified in the growth projections and buildout analysis section, there are two anticipated areas of new residential development. Anticipated population growth due to the northwest and southeast residential areas could be up to 804 and 5,242 people, respectively, depending on development density. Calculations were performed to

determine if two-lane roads are sufficient to carry the traffic generated by the development or if four lane collector or arterial roads are necessary.

The Institute of Transportation Engineers (ITE) Trip Generation Manual documents several methods for estimating the traffic volumes generated by development and specific to different land use types. Since the southeast residential area has the potential for much greater population growth, it was used in the traffic volume calculations. The single-family detached housing land use was used with population being the input variable. Assuming maximum buildout of the area, the Saturday peak hour generator scenario produced the greatest traffic volume at 237 vehicles per hour (vph) for a population of 5,242 people. The maximum lane capacity of a street is considered to be 1,700 vehicles per lane per hour according to the Transportation Research Board's (TRB) Highway Capacity Manual. The traffic volume produced by the fully built out southeast residential area is far below this threshold; therefore, two-lane streets are sufficient to carry the traffic.

The northwest residential area is located northwest of Jefferson Street and will be accessed by existing streets when developed. The access routes are anticipated to be streets that connect through to Frontage Road and Railway Avenue which are Kansas Street, Illinois Street, Dakota Street, California Street, and Montana Street. This will potentially distribute traffic relatively evenly through the streets depending on development layout, departure location, and destination. However, the City has an opportunity to develop certain routes to function as a collector to the northwest residential area. Due to its central location and its potentially efficient connection to Frontage Road/MT-2, Dakota Street is seen as a likely candidate to fill the role of collector street. This would require the re-development of the intersection of Frontage Road, Railway Avenue, Dakota Street, Elm Street, and 2nd Avenue West. Due to the number of legs and odd entry angles, a roundabout or combination of roundabout and adjacent intersections could efficiently manage the varying traffic volumes on Frontage Road, Dakota Street, and Railway Avenue. Although California and Montana Streets are currently more developed to access the area, they do not provide the efficiency of traffic movement due to offset intersections and sharp curves. With some development, Dakota Street could improve the efficiency of traffic movement.

The potential access routes to the northwest residential area are predominantly gravel-surface streets. Development of the access routes would include widening and paving streets, infilling sidewalks where they don't currently exist, and adding curb and gutter in select locations. Most of the streets would be paved to a 32-foot width and keep the gravel parking lanes where they currently exist. Dakota Street would be widened to 40 feet for two 12-foot travel lanes and an 8-foot paved parking lane on each side of the street. California Street would remain at its current width, 26 feet, due to existing curb and gutter. The total estimated construction cost for street improvements and roundabout development to serve the northwest residential area is estimated to be approximately $7.5 million.

The southeast residential area is located southeast of Talc Road on each side of Kyd Road and will likely be accessed predominantly by Kyd Road. It is possible that a portion of the development may connect to Bench Road, but it is not certain at this time. Kyd Road enters Three Forks from the southeast and traffic may be distributed to a number of local residential streets. The opportunity for efficient traffic movement to the west and northwest is by Ivy Street which connects to S-287 and Frontage Road/MT-2. Talc Road travels northeast and connects to MT-2 near I-90. These two routes are likely the two primary existing routes that will access Kyd Road and the southeast residential area.

The intersection of Kyd Road with Talc Road, Ivy Street and 4th Avenue East is an odd arrangement of legs and angles. As with the northwest residential area, a roundabout seems best suited to manage traffic distribution in this intersection. Since Kyd Road and Talc Road are higher speed rural routes than the local streets of Three Forks and have an existing 24-foot paved width, 4-foot paved shoulders are recommended to be added to these routes along with a full width asphalt overlay. A 10-foot paved multiuse path is proposed along the east side of Kyd Road and the north side of Talc Road to connect to the existing path that begins at the intersection of Talc Road and 7th Avenue East. A sidewalk is recommended for the west side of Kyd Road since development will also extend to the west. Ivy Street and the short segment of 5th Avenue West provide connections to MDT routes to the west and should be widened and paved. Since industrial uses are present south of Ivy Street, 4-foot paved shoulder and no sidewalk is appropriate for the south side of the street. An 8-foot paved parking lane and new sidewalk are proposed on the north side of the street. 5th Avenue West will have paved parking lanes on each side of the street due to the presence of existing homes on each side. The total cost for street improvements and roundabout development to serve the southeast residential area is estimated to be approximately $7.6 million.

Priority Street Improvements: Based on the results of the PASER analysis and discussions with City staff, a prioritized list of paving projects was developed with an accompanying estimation of project costs to assist with planning street improvements. The assigned priorities consider the community importance, street condition, and anecdotal traffic volumes. Unit price estimates for the described resurfacing and reconstruction improvements were prepared assuming work would be contracted out. It is important to recognize the recommended improvements are considered applicable in accordance with the context of this preliminary analysis. At the actual construction stage, each street should be thoroughly analyzed to verify the applicable improvement measure needed. The total cost to construct the City's top street priorities is approximately $3.7 million.

Paving Streets in Northwest Area: The majority of streets northwest of MT-2 are gravel-surfaced streets. The City has expressed a desire to pave these streets in the future. A couple of streets including West Cedar Street, California Street, and Front Street are currently paved and serve as the main access routes for this portion of the City. A proposed project to pave all streets in the northwest area should include improvements to these streets as well. The approximate construction cost to pave the gravel-surfaced streets in the northwest area is $3.6 million. This estimate does not include the streets that would need to be upgraded to serve the northwest growth area as those streets were included in the growth-related street improvements cost estimate.

School Campus Pedestrian and Safety Improvements: A number of pedestrian and safety improvements have been proposed by the City in the vicinity of the Three Forks School Campus. They include:

- Replacement of a deteriorating section of sidewalk on the south side of East Neal Street between 2nd and 3rd Avenues East and elimination of a deteriorated pedestrian ramp.
- Improved signage around the school for designation of 1-hour parking areas and direction of traffic flow.
- Installation of concrete jersey barriers at strategic locations for conversion of North 4th Avenue East between Neal Street and Oak Street to a one-way southbound street.
- Installation of two rectangular rapid flashing beacons (RRFB) at the crosswalk on Neal Street between 2nd and 3rd Avenues East.

Golf Course Pedestrian and Safety Improvements:
Pedestrian and safety improvements have also been proposed by the City in the vicinity of the Headwaters Golf Course at the intersection of Talc Road and 7th Avenue East. This improvement includes the installation of four LED solar flashing stop signs at the intersection.

Table 9 summarizes the City's transportation system priority projects over the next five to ten years along with the estimated fiscal year of completion. The priority projects focus on asphalt upgrade capital projects and do not include typical street maintenance like chip seals, crack seals, and graveling. The City has a robust street maintenance program in place which currently addresses maintenance projects. Potential funding sources are also listed, and the implementation section of this CIP provides additional details on funding.

When considering the timing of street improvements, careful thought should be given to the infrastructure beneath the street. For example, if there is an old cast iron water main beneath a particular street, the water main replacement project should happen before any substantial street improvements are considered. It would be advantageous for the City to complete applicable infrastructure planning studies first (such as a stormwater PER) so that asphalt improvements are not installed prior to any major planned underground work.

Table 9 – Transportation System Project Summary

Project Name	Estimated Fiscal Year	Total Estimated Project Cost	Potential Funding Sources
Street Maintenance Master Plan	2029	$16,000	CDBG
Long Range Transportation Plan(1)	2025	$80,000	CDBG, Impact Fees
Bicycle/Pedestrian Master Plan(1)	2028	$30,000	CDBG, Impact Fees
Northwest Growth-Related Improvements(1)	>2029	$7,511,000	SID, Impact Fees
Southeast Growth-Related Improvements(1)	>2029	$7,595,000	SID, Impact Fees
Priority Street Improvements	>2029	$3,680,000	SID, Gas Tax
Northwest Paving	>2029	$3,357,000	SID, Gas Tax
School Pedestrian and Safety Improvements	2024	$26,000	Local Funds
Golf Course Pedestrian and Safety Improvements	2024	$4,000	Local Funds

(1)Denotes projects that are related to or needed to serve additional population in Three Forks.

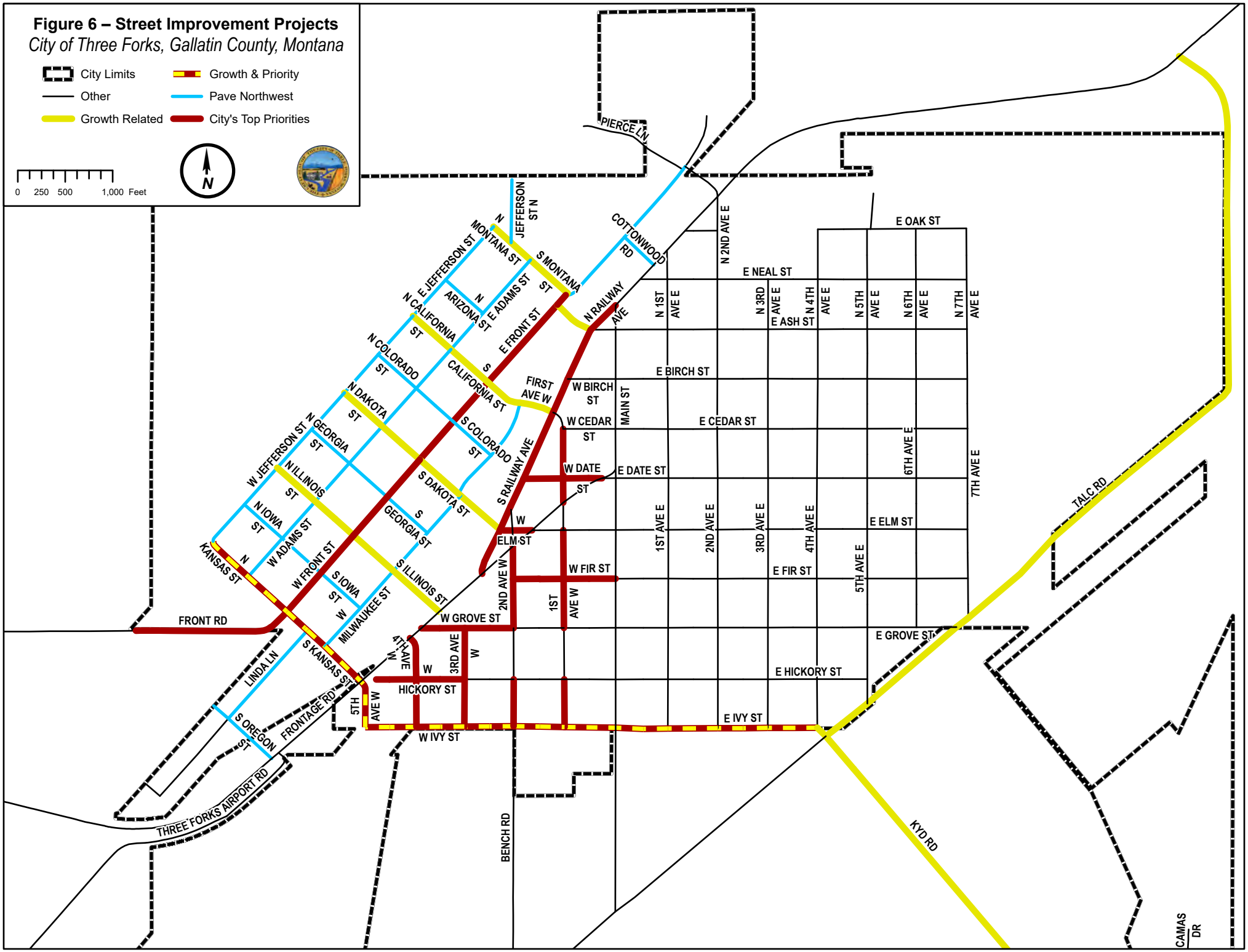
Figure 6 – Street Improvement Projects
City of Three Forks, Gallatin County, Montana
City Limits
Other
Growth Related
Growth & Priority
Pave Northwest
City's Top Priorities
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PIERCE LN
JEFFERSON ST N
N MONTANA ST
S MONTANA ST
COTTONWOOD RD
N 2ND AVE E
E OAK ST
E NEAL ST
N 1ST AVE E
N 3RD AVE E
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N 5TH AVE E
N 6TH AVE E
N 7TH AVE E
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E BIRCH ST
E CEDAR ST
E DATE ST
E ELM ST
E FIR ST
E GROVE ST
E HICKORY ST
E IVY ST
E JEFFERSON ST
N CALIFORNIA ST
ARIZONA ST
E ADAMS ST
E FRONT ST
N RAILWAY AVE
N COLORADO ST
CALIFORNIA ST
FIRST AVE W
W BIRCH ST
MAIN ST
W CEDAR ST
N DAKOTA ST
W JEFFERSON ST
N GEORGIA ST
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2ND AVE W
W FIR ST
1ST AVE W
FRONT RD
W GROVE ST
MILWAUKEE ST
4TH AVE W
3RD AVE W
W HICKORY ST
S KANSAS ST
LINDA LN
5TH AVE W
FRONTAGE RD
W IVY ST
S OREGON ST
THREE FORKS AIRPORT RD
BENCH RD
TALC RD
KYD RD
CAMAS DR

MUNICIPAL BUILDINGS

The City is responsible for the maintenance of buildings owned by the City including City Hall, the community library, and two shop/maintenance facilities. Additionally, the City contracts with the Gallatin County Sheriff's Department for law enforcement services and the City provides the County an office space free of charge. The office space currently used by the Sheriff's Office is rented space with a remaining 10-year lease. Many of the municipal buildings were originally constructed in the 1920's era and need remodeling and upgrades. Additionally, many facilities require expansion to serve a growing population.

Municipal Building Needs and Future Projects

The following projects are priorities over the next several years to maintain, repair, improve, and plan for future needs of the municipal buildings in Three Forks.

City Hall Renovation: This project would include modernization of the existing facilities to make the building more efficient and user friendly to staff, the public, City boards, and City Council. The work would generally include reconfiguration of the building including the removal and construction of new walls, new doors, new carpet, drywall and painting, electrical wiring, and installation of a new HVAC system. The estimated cost to complete the City Hall improvements is $106,000.

City Hall

Combined City Hall-Community Center-Firehall-Sheriff's Office PAR: This project would consist of completion of a Preliminary Architectural Report (PAR) to better understand, and address needs related to a potential building which the City could combine a new city hall, community center, firehall, and sheriff's office. It is recommended the City contract with architectural consultants to evaluate the current condition and feasibility of designing, funding, and constructing such a facility. The estimated cost to complete such an architectural evaluation is $65,000.

Shop Facility at the WWTP: This project would result in construction of an additional shop facility at the WWTP for the purposes of equipment storage and maintenance operations. The estimated cost to construct a new shop facility will depend on the size of facility needed.

Library Improvements: The Three Forks Community Library is a public library located at 607 South Main Street. The building was originally built in 1952 as a church. The City acquired the building roughly 20+ years ago and the building has been retrofitted and remodeled throughout the years to improve its function to serve the general public. The current building doors do not meet American with Disabilities Act (ADA) requirements. A project is needed to add ADA doors to the facility. The estimated cost of the doors is $52,000.

Library

The library is also in need of several other minor improvements such as new gutters, air ducts, lights, and ceiling treatments. The estimated combined cost of these improvements is approximately $15,000.

Table 10 summarizes the City's building priority projects over the next five to ten years along with the estimated fiscal year of completion. Potential funding sources are also listed, and the implementation section of this CIP provides additional details on funding.

Table 10 – Municipal Buildings Project Summary

Project Name	Estimated Fiscal Year	Total Estimated Project Cost	Potential Funding Sources
City Hall Renovation	2025	$106,000	Local Funds
Combined City Facility PAR(1)	2025	$65,000	CDBG, Impact Fees
WWTP Shop Facility	2029	Unknown	MCEP, DNRC, SRF, Local Funds
Library ADA Doors	2025	$52,000	Local Funds
Library Improvements	2025	$15,000	Local Funds

(1)Denotes projects that are related to or needed to serve additional population in Three Forks.

FIRE DEPARTMENT

Three Forks Fire Hall

The Three Forks Volunteer Firefighters are a department of the City of Three Forks. The firefighters are considered employees of the city; however, the city has an interlocal agreement with the Three Forks Rural Fire District allowing the District to utilize city volunteers for emergency response calls within their district.

Three Forks Volunteer Fire District (TFVFD) is one of the largest fire districts in Gallatin County. The District encompasses approximately two hundred (200) square miles in Gallatin, Broadwater, and Jefferson counties, including 12 miles of Interstate 90. The TFVFD provides manpower, fire suppression, rescue, and other services to both the City and the District. It also houses District-owned equipment. TFVFD membership may consist of up to 28 volunteer firefighters, including five officers. Both City and District revenues fund TFVFD. TFVFD responds to an average of 200 calls per year.

The Three Forks Fire Hall is located at 13 East Date Street and is a cinder block building built in 1950. Its original structure was a 3-bay garage with roughly 500-square-feet of space which serves as a training area, office, kitchen, and has one combination toilet/sink bathroom. Over the decades, three additional bays were added and serve as the home for the Three Forks Rural Fire District vehicles. Finally, two more bays were added to the eastern part of the lot for the Three Forks Ambulance District. The building is owned by the City who charge rent to the other entities for their proportionate share of the space. In 2014, the Three Forks Ambulance built its own facility and moved out of the Three Forks Fire Hall. This freed up two bays, which became utilized by the Three Forks Rural Fire District as well.

Fire Department Needs and Future Projects

The following projects are priorities over the next several years to maintain, repair, improve, and plan for future needs of the fire department in Three Forks.

Fire Hall Expansion: The Three Forks Fire Department has outgrown its current facility. This project would add roughly 250 square feet, which will add 2 more ADA showers and 1 ADA bathroom. The total estimated cost for this project is $75,000. The proposed addition is illustrated in Figure 7.

Equipment: The fire department is also in need of various equipment to increase safety and efficiency of operations as well as a new fire truck.

Figure 7 – Proposed Addition to Existing Fire Hall

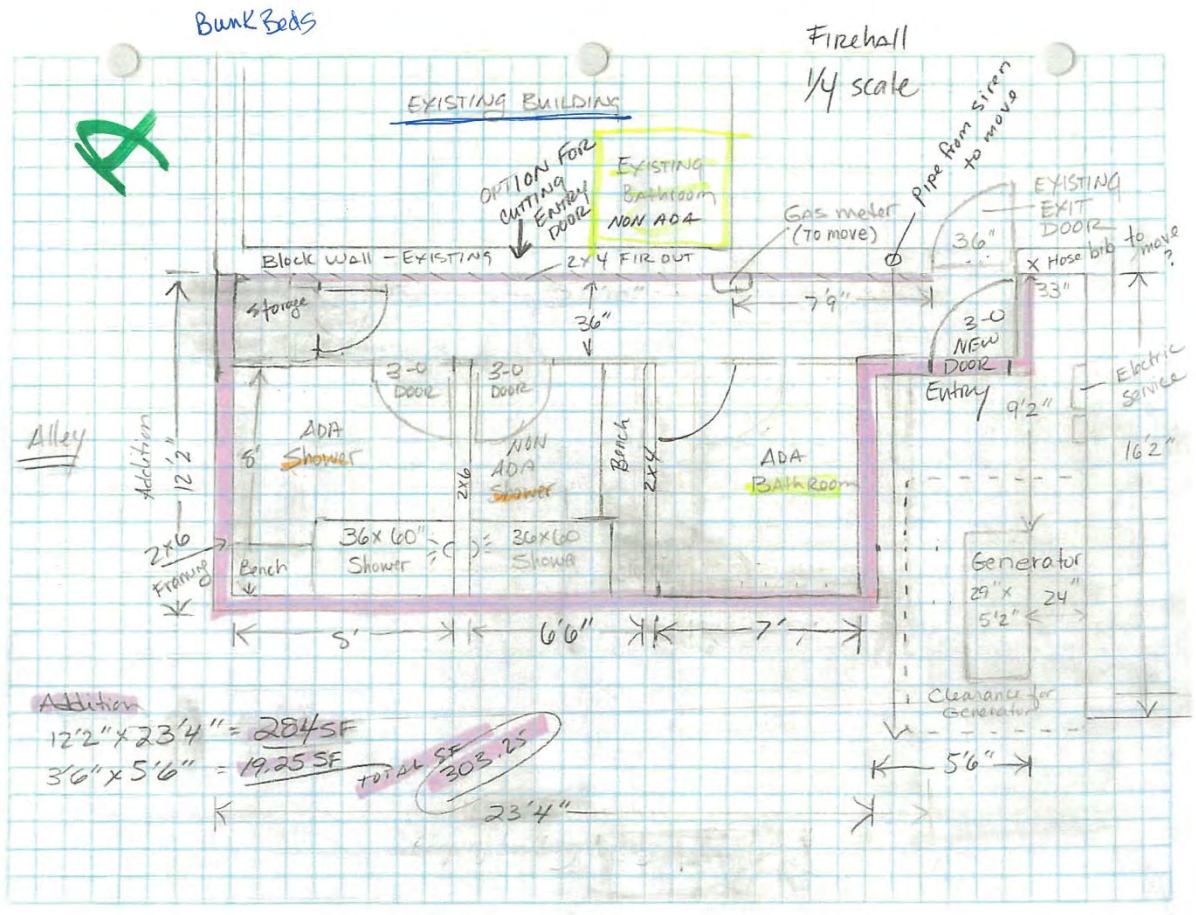


Table 11 summarizes the City's Fire Department priority projects and needs over the next five to ten years along with the estimated fiscal year of completion. Potential funding sources are also listed, and the implementation section of this CIP provides additional details on funding.

Table 11 – Fire Department Project Summary

Project Name	Estimated Fiscal Year	Total Estimated Project Cost	Potential Funding Sources
Fire Hall Expansion	2025	$75,000	FEMA AFG, RD Community Facilities
Strut Kit	2026	$12,000	FEMA AFG
Hydrant Storz Fittings	2026	$1000 each	FEMA AFG
Fire Hose Stock	2026	$10,000	FEMA AFG
New Fire Truck	2029	$750,000	FEMA AFG
Dual Band Portable Radios	2026	$6500 each	FEMA AFG
Dual Band Mobile Radios	2026	$8000 each	FEMA AFG

EQUIPMENT

The City maintains a variety of large equipment and vehicles related to operations and maintenance. Some examples include sewer jetting equipment, compressor, backhoe, trailers, cement mixer, mowing equipment, snowplow and sanding equipment, and a fleet of vehicles including trucks and a fire pumper. All of this equipment must be routinely maintained and occasionally replaced.

Equipment Needs and Future Projects

The following equipment needs are anticipated over the next five to ten years.

Table 12 – Equipment Needs Summary

Project Name	Estimated Fiscal Year	Total Estimated Project Cost	Potential Funding Sources
City Work Truck Replacement	2025 & 2026	$100,000	Local Funds
Small Truck for Garbage Hauling and Code Enforcement.	2025	$10,000	Local Funds
Backhoe Replacement	2027	$150,000	Local Funds
Various Equipment	2029	$20,000	Local Funds

PARKS AND RECREATION

The City of Three Forks maintains seven parks which cover just over a combined 9-acres. The parks offer a wide variety of recreational and outdoor opportunities. All of them are easily accessible via foot traffic along city sidewalks, or via the Headwaters Trail System.

For the purposes of this plan “parks” are defined as: a park, playground, recreational facility, pond areas, or any other area in the city, developed or undeveloped, owned or used by City residents, and devoted to active or passive recreation.

The City’s park maintenance responsibilities include irrigating, mowing, trimming trees and bushes, spraying weeds and insects, and replacing trees and playground equipment as needed. This work costs an average of $40,000 each year. To assist with these maintenance costs the City has established a fee schedule in order to use some park facilities.

The following narrative describes the current City park facilities and any needed upgrades for each location. In addition, City wide park and recreation needs are described.

Sacajawea Park

This park was the oldest and first park dedicated by the City. It was started by the Daughters of the American Revolution who placed a rock in the park center honoring Sacajawea. A significant fundraising effort helped to pay for the building of a new wall surrounding the park and to purchase the statute of Sacajawea that resides in the park.

Helton-Peterson Park

Located on West Adams Street, between Colorado and Dakota Streets, this half-block of land was purchased in 1970. In 1971, the park was dedicated as a city park. This park includes a full-size basketball court, playground equipment (complete with a merry-go-round), and numerous picnic tables. The rest of the park has a large grassy area.

Bertagnolli Park

This 1-acre city park, which is the only one to have a baseball diamond, was dedicated to Tom Bertagnolli in his memory to honor his dedication for coaching so many Little League teams over the years. The park also has various playground equipment including slides, swings, and a seesaw, as well as a half basketball court. The baseball field has two concrete block dugouts and two sets of 3-teired bleacher benches for spectators. The baseball field needs significant maintenance work to ensure it is a safe and user-friendly facility.

Stevenson Park

This park offers a covered gazebo, complete with electrical hookups and enough picnic tables to seat fifty comfortably. The park also offers playground equipment with swing sets and a new curly slide, as well as a basketball court, a sand volleyball court and a large, grassy area. A wading pool is located within the park and is open in the summer months. The park also has a tennis court available and was recently updated to a professional-grade court with fencing, a new rubberized court, nets, and benches. A large concrete pad for an ice-skating rink was also added in 2019. This pad was equipped with 6 basketball hoops for summer use. This park is bordered on all sides by City streets yet does not contain any sidewalks. The installation of sidewalks has been identified as a need at this park to promote pedestrian use and safety. There is approximately 1,300 feet of street frontage at the park that would require sidewalks. The cost to construct a sidewalk can vary from $6 and $12 per square foot, with an average of

Stevenson Park

around $9 per square foot. Based upon this average, 1,300 feet of sidewalk constructed at a 4-foot width could cost approximately $46,000. This park is currently the only park which charges a fee for reserved use of the gazebo and rental of BBQ.

John Q. Adams Milwaukee Railroad Park

This park offers a large grassy area, shaded with spruce trees, and picnic benches. The caboose located at the park is being refurbished. This park is the location of the summer Farmer's Market. The Park also includes an old steam engine in honor of Three Forks' history as a railroad town as a stop for the Trident-Northern Pacific Railroad. The museum at the park has had $500,000 in improvements completed recently.

Veteran's Park

This park memorializes the veterans lost in more recent wars, as well as to honor those who have been able to return home. In 2016, the Veteran of Foreign Wars Post #7621 installed six flagpoles to fly the flags of all branches of the military, as well as the USA flag with POW-MIA flag flying below it. These are kept lit at night and serve to honor all those servicemen and women who sacrifice their time and lives for the community. The park also contains the Japanese Memorial Plaque and is home to the City's annual "lighted" Christmas tree display.

Bellach Park & Three Forks Ponds

In 1999, the Bellach family gifted a fire truck playground to be placed at the Three Forks Ponds park area in memory of Ed Bellach. This park houses several picnic tables and BBQs as well as toddler-aged playground equipment that was added to the fire truck play area from the Kiwanis Club upon its dissolvement. The volleyball courts at the park need annual maintenance which would include additional sand and some edge/shoring work. In addition, there is a need to address water quality in Pond #1. Based upon testing by Montana Fish, Wildlife and Parks, the water quality is poor. The City would like to identify potential steps that could be taken to improve the pond's water quality for public use. A thorough assessment of the situation is needed to determine what actions could be taken. The construction of an additional beach at the ponds has also been identified as a need as well as new playground equipment.

Headwaters Trail System

The Headwaters Trail System is a paved network of trails that runs along the former Milwaukee Railroad bed through the City. The system provides almost 12 miles of paved trails in and around Three Forks, running to both the Headwaters State Park and the Jefferson River Droulliard Fishing Access. The system also includes walking and biking options to the Pogreba Field Airport. Plans to expand the trail system include extending the trail to Manhattan, and other parts of the Gallatin Valley.

Parks Planning Studies

Envision Three Forks identified strategic action plan items to develop a parks and trails master plan that identifies future park locations, types, development, and financing techniques in addition to undertaking a feasibility study to determine the potential for a recreation center, swimming pool/splash park, tennis courts, and banquet facilities. These planning studies were identified as priorities within the next three to five years.

Splash Park

The City Council has identified a need for a splash park. Splash parks are also known as spray parks, splash zones, water playgrounds etc. Such parks are generally concrete areas fitted with a non-slip or safety surface and various nozzles and features that can shower, spray, rain, mist, and shoot streams of water to create an inviting place for recreational water play for children and adults. Most splash parks operate with almost no water depth and as the water splashes onto the concrete surface, it is collected, filtered, sanitized, and re-circulated to recycle the water. Based upon recent splash park construction projects in Montana, the cost of such a project could range from $275,000 to $350,000.

City Recreation Center

A recent community needs assessment by the City identified a need for a more multifunctional recreational/community building center. In its simplest form it could consist of a metal building/pavilion with a roof over the concrete basketball court/ice rink area in Stevenson Park. This would provide protection for the ice rink, shade for a variety of summer uses but would need to be tall enough to accommodate basketball games.

Wayfinding Signage

There is a definitive need for signage in the City to help residents and visitors find parks, important points of interest and community facilities. Wayfinding signage is typically described as any signage that helps direct people around a community. Its purpose is to guide residents or visitors from one location to another via simple visual signage. The cost of such a project is dependent on the complexity of the signage, their location, and the number of signs. Typically, such signage is developed through the creation of a “wayfinding plan” in order to obtain public and business support for such signage.

The City of Great Falls, for example, completed a wayfinding plan in 2021 that cost just under $70,000, with the estimated installation costs expected to be at least $80,000. While the City of Three Forks would not undertake such a complex and expensive project, it does provide an example of the costs involved in such an undertaking.

Rodeo Grounds Arena

The Rodeo Board wishes to add another 1000 seats by adding a 500-person covered wing on each side of the current bleacher configuration. The bleachers are estimated to cost $550,000. The cook shack is also in need of upgrades.

The City's current priorities for park and recreation facilities are listed in the following table.

Table 13 – Parks and Recreation Project Summary

Project Name	Estimated Fiscal Year	Total Estimated Project Cost	Potential Funding Sources
Bertagnoli Park Baseball Field Maintenance	2025	$2,000	LWCF, MT Tourism Grant, Private Foundations, Local Funds
Stevenson Park Sidewalks	2026	$46,000	LWCF, MT Tourism Grant, Private Foundations, Local Funds
Bellach Park Volleyball Court Maintenance	2025	$2,000	LWCF, MT Tourism Grant, Private Foundations, Local Funds
Bellach Park Pond #1 Water Quality Assessment and Action Plan	2026	$25,000	LWCF, MT Tourism Grant, Private Foundations, Local Funds
Additional Beach at Bellach Park	2025	$150 - $500 per foot of beach. This does not include permitting costs.	LWCF, MT Tourism Grant, Private Foundations, Local Funds
Parks Master Plan(1)	2027	$30,000	CDBG
Feasibility Study for Future Rec Center, Swimming Pool, Tennis Courts(1)	2027	$55,000	CDBG
Future Splash Park	2027	$275,000 - $350,000	LWCF, MT Tourism Grant, Private Foundations, Local Funds
Wayfinding Signage Plan	2025	$25,000	LWCF, MT Tourism Grant, Private Foundations, Local Funds
Rodeo Grounds Additional Bleacher Seating	2025	$550,000	LWCF, MT Tourism Grant, Private Foundations, Local Funds

(1)Denotes projects that are related to or needed to serve additional population in Three Forks.

FLOOD HAZARD MITIGATION

The City of Three Forks submitted funding applications to FEMA in January 2022 for the purposes of funding a flood mitigation project to reduce flooding risk from the Jefferson River. The proposed mitigation is a grass-lined channel and culvert crossing improvement project that will intercept flood waters west of Three Forks and divert them back to the Jefferson River before reaching the City. The construction cost is estimated at $5.5 million; the project would reduce flood risk and remove all city limits of the City from the Jefferson River floodplain.

The City intends to fund its 25% cost share of the project with saved cash of roughly $400,000, and through obtainment of a 20-year State Revolving Fund (SRF) loan and formation of a Special Improvement District (SID). The City initiated the SID process in the fall of 2022 and the SID was finalized on October 25, 2022, through passage of a resolution to create Special Improvement and Maintenance District No. 34.

The Madison River floodplain levees are not currently certified by the Army Corp of Engineers or FEMA. Certification of these levees would reduce the floodplain on the east side of City and positively impact future development and the need for flood insurance. Such a project would require working with the existing Three Forks Dike & Drain District, which is a board appointed by the Gallatin County Commission. The Madison River levees are not within City limits; however, certification of the levees will reduce floodplain area within the City. Therefore, the City is in support of a project to certify the levees. A project for levee certification would first require a feasibility study to develop the project and project approach. A levee construction project could be expected to cost roughly $2 million.

Flood Mitigation Needs

Table 14 – Flood Hazard Mitigation Project Summary

Project Name	Estimated Fiscal Year	Total Estimated Project Cost	Potential Funding Sources
Jefferson River Flood Mitigation	2026	$5,500,000	FEMA, SID
Madison River Levee Certification	2028	$2,000,000	FEMA, SID

IMPLEMENTATION

Priority Recommendations

The City of Three Forks has created this Capital Improvements Plan (CIP) to ensure that its project priorities accurately reflect the City's needs. While all projects listed in the Plan are needed, the Council ultimately had to decide what the final list of priorities should be based on criteria ranging from public health and safety to fiscal capacity. The Council will use this document as the primary financial tool for setting the City's annual overall budget. The document will be updated on a 5-year schedule or as projects are completed and priorities change.

Timeline

In general, the City of Three Forks will initiate the completion of its highest-priority projects within two years of the adoption of the CIP. The Council may 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 City's analysis to fund projects is meant to keep user/tax rates stable and maximize state and/or federal loan and grant funds for capital expenditures. Incurring some debt is expected with large capital projects and annual evaluations will be needed to balance debt service and operating expenditures. The City 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 on City 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 City 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 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 local 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. bonds 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 City 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 an 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 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.

Exactions: Development exactions consist of conditions or financial obligations imposed on property developers that can help the City provide additional public facilities or services required by new growth. The developers of new properties are typically required to provide at least a portion of the added infrastructure such as water and sewer lines, streets etc. necessitated by their development. They are intended to help growth to "pay for itself" and to lessen impacts of new development on existing public facilities. They can take several forms including installation of infrastructure, impact fees levied, financing of infrastructure improvements, and land donations.

Annual Needs Assessment: Local governments are encouraged to annually assess their needs. A needs assessment may focus only on public infrastructure, or it may include every service provided by the local 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 do their 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 the information be thoroughly documented, and the information be presented to the public. See the Public Outreach and Engagement section of this Plan for a description of how the City of Three Forks attempted to measure the City's needs.

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 City must plan for specific projects to be successful in making improvements.***

Department of Commerce Montana Coal Endowment Program (MCEP) Grants can provide up to $40,000 for preparing Preliminary Engineering Reports (PER) and Capital Improvements Plans (CIP). These grants require a dollar-for-dollar match.

Department of Natural Resources and Conservation (DNRC) Renewable Resource Grant and Loan Program (RRGL) offers planning grants that can be used for preparation of new PER ($15,000 max), Technical Narrative ($8,000 maximum), and updates to Technical Narratives and PER's, as well as CIP's ($8,000 max). The planning must address natural resource concerns.

Department of Commerce Community Development Block Grant (CDBG) Planning Grants are available on an annual cycle up to $50,000 for planning activities and documents (Growth Policy, CIP, Housing Plans, CEDS, etc.) and preparation of Preliminary Engineering Reports (PER)/Preliminary Architectural Reports (PAR). CDBG applications for a PER or CIP for water, wastewater or storm water systems that are not directly tied to economic development through job creation and job retention are accepted however, they may be considered secondary to other planning priorities for funding due to other state and federal program funds available. CDBG planning grants require a 1:3 local to grant funding match.

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 supporting economic development planning activities. Projects include central business district redevelopment, industrial development, feasibility studies, creation and maintenance of baseline community profiles, matching funds for federal funding; preproduction costs for film or media; and administrative expenses. In general, the Department will award up to $1 for every $1 in documented matching funds up to a total of $25,000 in BSTF funding.

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

Montana Coal Endowment Program (MCEP) is a state funded grant program administered by the Montana Department of Commerce (MDOC). MCEP provides financial assistance to local governments for water, wastewater, storm water, solid waste, and bridge infrastructure improvements. Grants can be obtained from MCEP 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. MCEP 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.

Renewable Resource Grant and Loan Program (RRGL) is funded through interest accrued on the Resource Indemnity Trust Fund and the sale of Coal Severance Tax Bonds, RRGL is a state program administered by the Montana Department of Natural Resources and Conservation (DNRC). RRGL'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 or more of these objectives and does not require matching funds.

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. CDBG grant funds may be applied for in an amount of up to $750,000 with a limit of $20,000 per LMI household, therefore, a community needs 22.5 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.

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 public 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.

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 related project expenses. Examples of essential community facilities include health care facilities, public facilities (City halls, courthouses, airport hangars, streets), community support services (childcare centers, community centers, fairgrounds), public safety, educational services, local food systems and food banks. Grant funding is based on population and median household income.

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.

Economic Development Administration (EDA) provides grant funding for infrastructure projects that demonstrate a need for the placement of a new business. The amount of grant is dependent on the number of jobs created.

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

Montana Main Street (MMS) Program is a state funded program and is administered through the Montana Department of Commerce. This Program promotes grassroots efforts to Member Communities through coordination and technical assistance, focused on a comprehensive approach to restoring healthy community's and preserving historic structures. Eligible projects include planning documents such as Downtown Master Plans and Revitalization Studies, Historic Preservation Plans, Preliminary Architectural Reports and Streetscape Design Plans, in addition to brick and mortar projects.

National Park Service Rivers, Trails and Conservation Assistance provides 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 and including art into revitalization work, including parks, downtown City pathways, plazas, green spaces, wayfinding, cultural tourism. All programs require a 1 for 1 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. Gas tax revenue can only be used for construction, reconstruction, maintenance, and repair of City streets and alleys.

Federal Emergency Management Agency (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 operations 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 provides funding to assist with 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 award.

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 reduce 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.

USDA Emergency Community Water Assistance Grants help eligible communities 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 disasters. A Federal Disaster Declaration is not required, and grant awards range from $150,000 for construction of transmission lines to $1 million to construct a water source or treatment facility. The City will be eligible for this funding if it experiences a significant infrastructure loss related to a disaster or emergency.

Private Foundations 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 City of Three Forks, 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 demands and maintenance needs.

Overall Priorities

The overall priorities for needed improvements have been established as shown in the following table based on input from the City staff, City Council and Mayor, and residents.

Table 15 – Overall Improvement Priorities

Facility	Estimated Fiscal Year	Project Name	Total Estimated Project Cost
Stormwater	2024	Subdivision Regulations Update	$90,000
Transportation	2024	Golf Course Pedestrian and Safety Improvements	$4,000
Transportation	2024	School Pedestrian and Safety Improvements	$26,000
Wastewater	2024	Wastewater PER/Master Plan(1)	$80,000
Buildings	2025	Library Improvements	$15,000
Buildings	2025	Library ADA Doors	$52,000
Buildings	2025	Combined City Facility PAR(1)	$65,000
Buildings	2025	City Hall Renovation	$106,000
Equipment	2025	Small Truck for Garbage Hauling and Code Enforcement	$10,000
Equipment	2025	City Work Truck Replacement	$50,000
Fire Dept.	2025	Fire Hall Expansion	$75,000
Parks	2025	Bertagnoli Park Baseball Field Maintenance	$2,000
Parks	2025	Bellach Park Volleyball Court Maintenance	$2,000
Parks	2025	Wayfinding Signage Plan	$25,000
Parks	2025	Rodeo Grounds Additional Bleacher Seating	$550,000
Parks	2025	Additional Beach at Bellach Park	$150 - $500 per foot of beach.

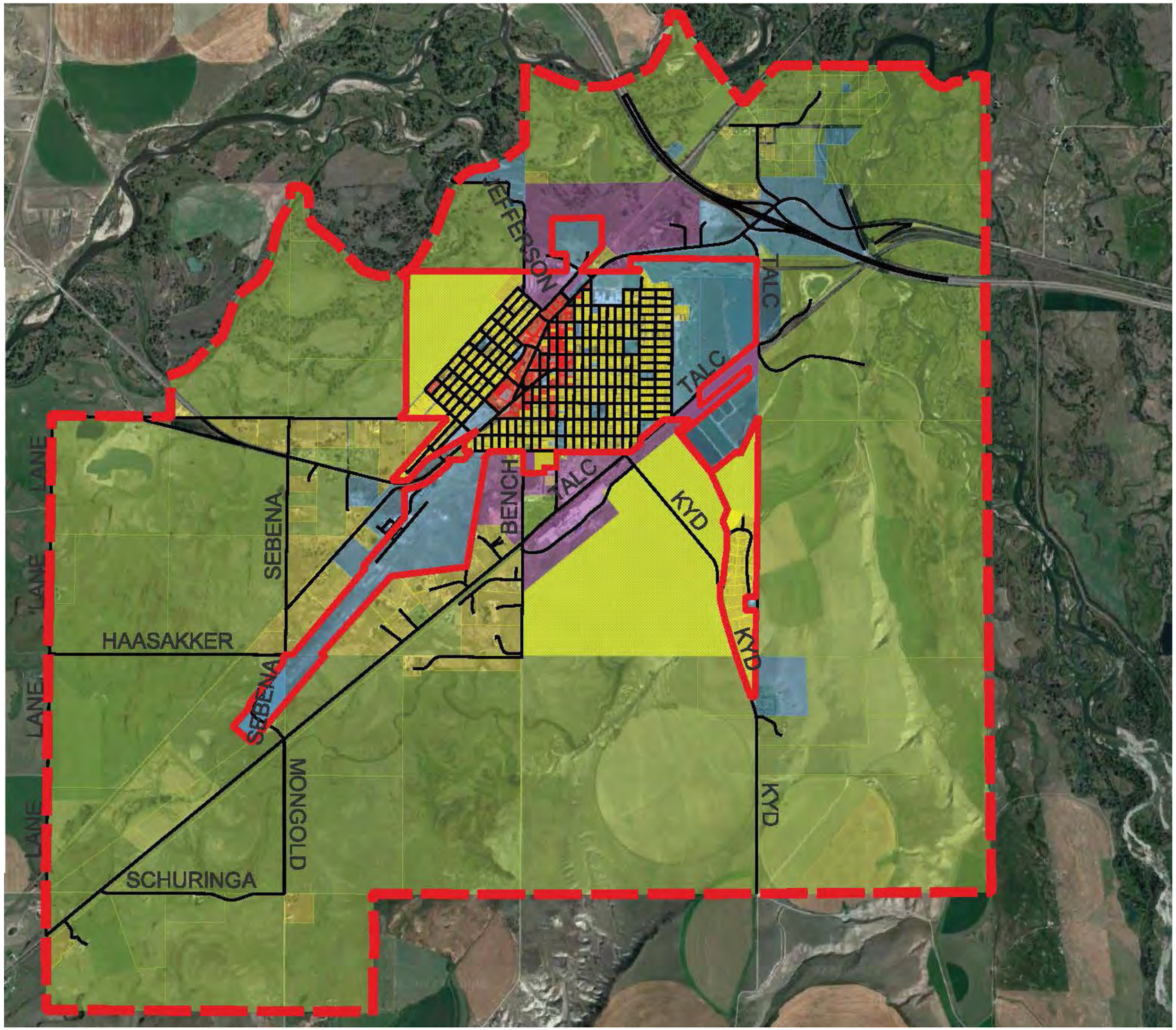
Facility	Estimated Fiscal Year	Project Name	Total Estimated Project Cost
Transportation	2025	Long Range Transportation Plan[1]	$80,000
Wastewater	2025	WWTP Solar Panel System	$123,000
Equipment	2026	City Work Truck Replacement	$50,000
Fire Dept.	2026	Fire Hose Stock	$10,000
Fire Dept.	2026	Strut Kit	$12,000
Fire Dept.	2026	Hydrant Storz Fittings	$1000 each
Fire Dept.	2026	Dual Band Portable Radios	$6500 each
Fire Dept.	2026	Dual Band Mobile Radios	$8000 each
Flood Mitigation	2026	Jefferson River Flood Mitigation	$5,500,000
Parks	2026	Bellach Park Pond #1 Water Quality Assessment and Action Plan	$25,000
Parks	2026	Stevenson Park Sidewalks	$46,000
Stormwater	2026	Stormwater PER/Master Plan[1]	$80,000
Wastewater	2026	RV Dump Station	$322,000
Water	2026	Transmission Improvements[1]	$1,375,000
Equipment	2027	Backhoe Replacement	$150,000
Parks	2027	Parks Master Plan[1]	$30,000
Parks	2027	Feasibility Study for Future Rec Center, Swimming Pool, Tennis Courts[1]	$55,000
Parks	2027	Future Splash Park	$275,000 to $350,000
Water	2027	WTP Chemical Feed Pumps & Valves	$40,000
Water	2027	Water PER/Master Plan[1]	$80,000
Water	2027	Lead Service Line Replacement	$2,225,000
Flood Mitigation	2028	Madison River Levee Certification	$2,000,000
Transportation	2028	Bicycle/Pedestrian Master Plan[1]	$30,000
Wastewater	2028	Sludge Removal and Disposal	$800,000

Facility	Estimated Fiscal Year	Project Name	Total Estimated Project Cost
Wastewater	2028	Collection System Improvements	$2,266,000
Wastewater	2028	Lift Station Upgrades[1]	$2,490,000
Wastewater	2028	WWTP Expansion[1]	$6,171,000
Water	2028	WTP Media	$22,000
Buildings	2029	WWTP Shop Facility	Unknown
Equipment	2029	Various Equipment	$20,000
Fire Dept.	2029	New Fire Truck	$750,000
Transportation	2029	Street Maintenance Master Plan	$16,000
Wastewater	2029	Upsize Collection System Trunk Main[1]	$3,563,000
Water	2029	Well Pump and Motor Replacement	$15,000
Water	2030	Water Main Replacements	$3,043,000
Transportation	>2029	Northwest Paving	$3,357,000
Transportation	>2029	Priority Street Improvements	$3,680,000
Transportation	>2029	Northwest Growth-Related Improvements[1]	$7,511,000
Transportation	>2029	Southeast Growth-Related Improvements[1]	$7,595,000
Water	>2029	Leak Detection Program	Unknown
Water	>2029	Water Supply Study[1]	Unknown

[1]Denotes projects that are related to or needed to serve additional population in Three Forks.

Appendix A

Future Land Use Map



Future Land Use Map and Categories

The future land use categories are described on the following pages. Each category outlines:

- general characteristics, features, and amenities;
- desired primary and secondary uses;
- suggested residential density range (i.e. dwelling units per acre);
- photo examples of typical land use and options.

PREVIOUS FUTURE LAND USE CATEGORIES	NEW FUTURE LAND USE CATEGORIES
Residential/Agricultural	Agricultural
Residential	Future Residential
Commercial and Industry	Downtown Commercial, Mixed Use/ Light Industrial, Industrial
Parks/Open	Public Land/Institutional

CITY OF THREE FORKS FUTURE LAND USE MAP

This map indicates growth opportunity to the northwest, assuming completion of planned floodway improvements. In the event these improvements are not completed, development will likely be focused to the southeast.

- *Three Forks City Boundary*
- *Growth Policy Planning Area*
- *Existing Residential*
- *Future Residential*
- *Commercial*
- *Industrial*
- *Public Land-Institutional*
- *Agricultural*

Appendix B

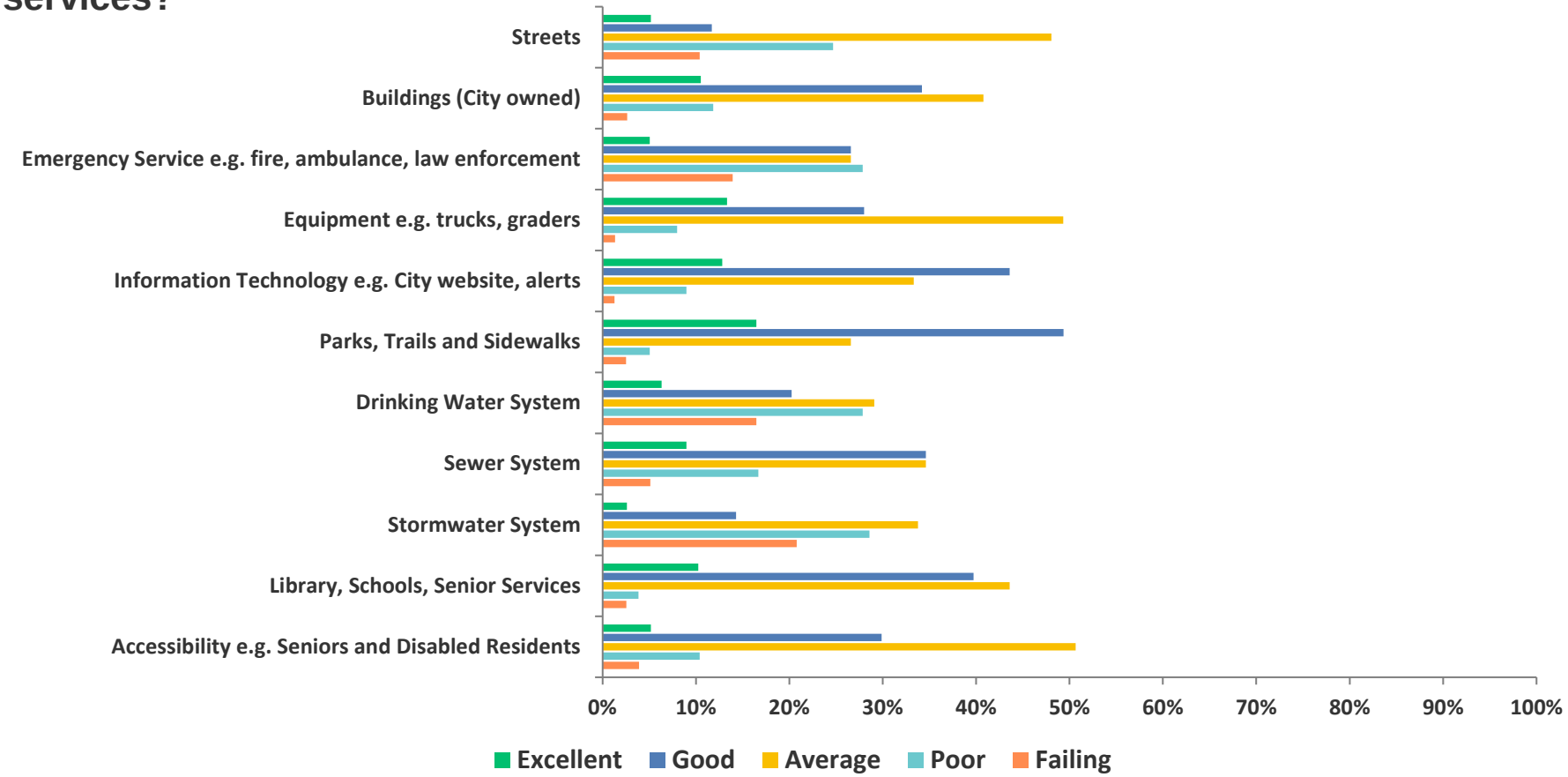
Public Survey Results

THREE FORKS CAPITAL IMPROVEMENTS PLAN SURVEY: RESULTS

Thursday, April 6, 2023

80 Total Responses.
Please note that many of the survey respondents did not complete all of the questions and therefore the response rate per question will vary.

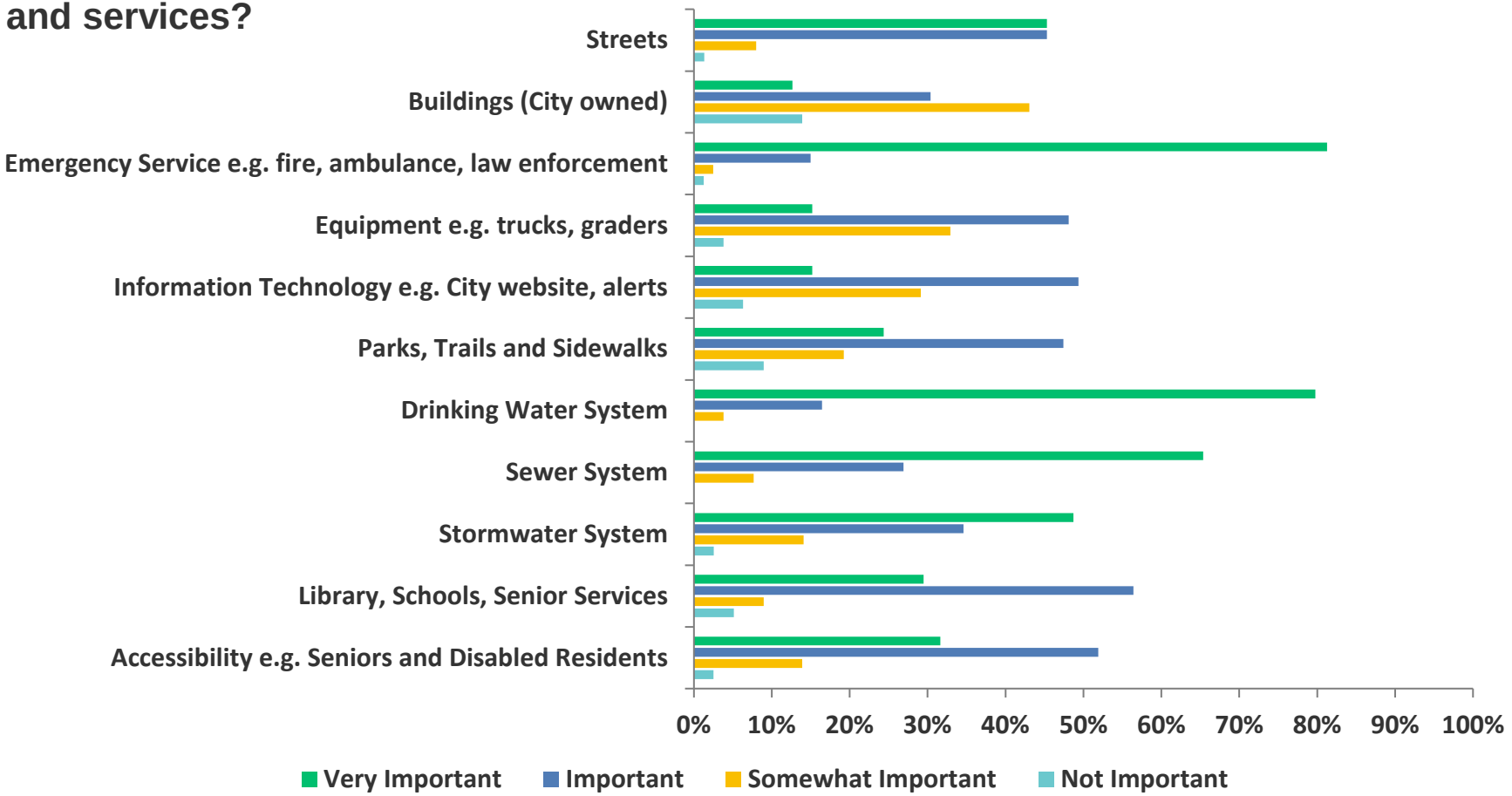
Question 1: What do you think is the condition of the City's current infrastructure and services?



Question 1: What do you think is the condition of the City's current infrastructure and services?

	EXCELLENT	GOOD	AVERAGE	POOR	FAILING	TOTAL RESPONSES
Streets	5.19%	11.69%	48.05%	24.68%	10.39%	
	4	9	37	19	8	77
Buildings	10.53%	34.21%	40.79%	11.84%	2.63%	
	8	26	31	9	2	76
Emergency Service	5.06%	26.58%	26.58%	27.85%	13.92%	
	4	21	21	22	11	79
Equipment	13.33%	28.00%	49.33%	8.00%	1.33%	
	10	21	37	6	1	75
Information Technology	12.82%	43.59%	33.33%	8.97%	1.28%	
	10	34	26	7	1	78
Parks, Trails and Sidewalks	16.46%	49.37%	26.58%	5.06%	2.53%	
	13	39	21	4	2	79
Drinking Water System	6.33%	20.25%	29.11%	27.85%	16.46%	
	5	16	23	22	13	79
Sewer System	8.97%	34.62%	34.62%	16.67%	5.13%	
	7	27	27	13	4	78
Stormwater System	2.60%	14.29%	33.77%	28.57%	20.78%	
	2	11	26	22	16	77
Library, Schools, Senior Services	10.26%	39.74%	43.59%	3.85%	2.56%	
	8	31	34	3	2	78
Accessibility	5.19%	29.87%	50.65%	10.39%	3.90%	
	4	23	39	8	3	77

Question 2: In your opinion, please rate the importance of the following infrastructure and services?



Question 2: In your opinion, please rate the importance of the following infrastructure and services?

	VERY IMPORTANT	IMPORTANT	SOMEWHAT IMPORTANT	NOT IMPORTANT	TOTAL RESPONSES
Streets	45.33%	45.33%	8.00%	1.33%	
	34	34	6	1	75
Buildings	12.66%	30.38%	43.04%	13.92%	
	10	24	34	11	79
Emergency Service	81.25%	15.00%	2.50%	1.25%	
	65	12	2	1	80
Equipment	15.19%	48.10%	32.91%	3.80%	
	12	38	26	3	79
Information Technology	15.19%	49.37%	29.11%	6.33%	
	12	39	23	5	79
Parks, Trails and Sidewalks	24.36%	47.44%	19.23%	8.97%	
	19	37	15	7	78
Drinking Water System	79.75%	16.46%	3.80%	0.00%	
	63	13	3	0	79
Sewer System	65.38%	26.92%	7.69%	0.00%	
	51	21	6	0	78
Stormwater System	48.72%	34.62%	14.10%	2.56%	
	38	27	11	2	78
Library, Schools, Senior Services	29.49%	56.41%	8.97%	5.13%	
	23	44	7	4	78
Accessibility	31.65%	51.90%	13.92%	2.53%	
	25	41	11	2	79

Question 3: What do you think is the best infrastructure improvement that the City has completed in the past 10 years? (Word Cloud)

A Word Cloud is a collection or cluster of words depicted in different sizes. The bigger and bolder the word appears, the more often it was mentioned by survey respondents.

Question 3: What do you think is the best infrastructure improvement that the City has completed in the past 10 years? (Responses paraphrased)

- Junior High and High School
- Sewer
- Sewer
- Tough to know
- Sidewalks
- Sewer
- School
- WWTP
- Sewer
- Wastewater treatment and water storage
- None
- Water
- Water treatment
- Haven’t noticed
- Too new to town
- Streets
- Sewer
- Walking paths
- Building
- Don’t know
- Building
- Don’t know
- Building
- None
- Don’t know
- Trail system
- Streets and water
- Water and sewer
- Trails
- New sewer lagoons and trails
- Water
- Parks and trails
- Water treatment
- Water/sewer
- Settling ponds
- Water
- Sewer treatment/lagoons
- Don’t know
- Parks and trails
- Streets and storm water terrible
- Don’t know
- Don’t know

Question 3: What do you think is the best infrastructure improvement that the City has completed in the past 10 years? (Responses paraphrased)

- Not the streets! I have lower water pressure now, but parks and library are great
- Water
- Roadways
- Water/sewer
- Trails
- Trails
- Old sidewalks need to be replaced
- Water/sewer
- Sewer
- The way the City communicates is outstanding. Website and FB pages are informative and excellent.
- Sewer system
- Has anything been done?
- Streets, water and sewer
- None
- Walking path
- Walking path

Question 4: What do you think is the single most important issue the City faces in terms of the infrastructure and services it provides? (Word Cloud)

A Word Cloud is a collection or cluster of words depicted in different sizes. The bigger and bolder the word appears, the more often it was mentioned by survey respondents.

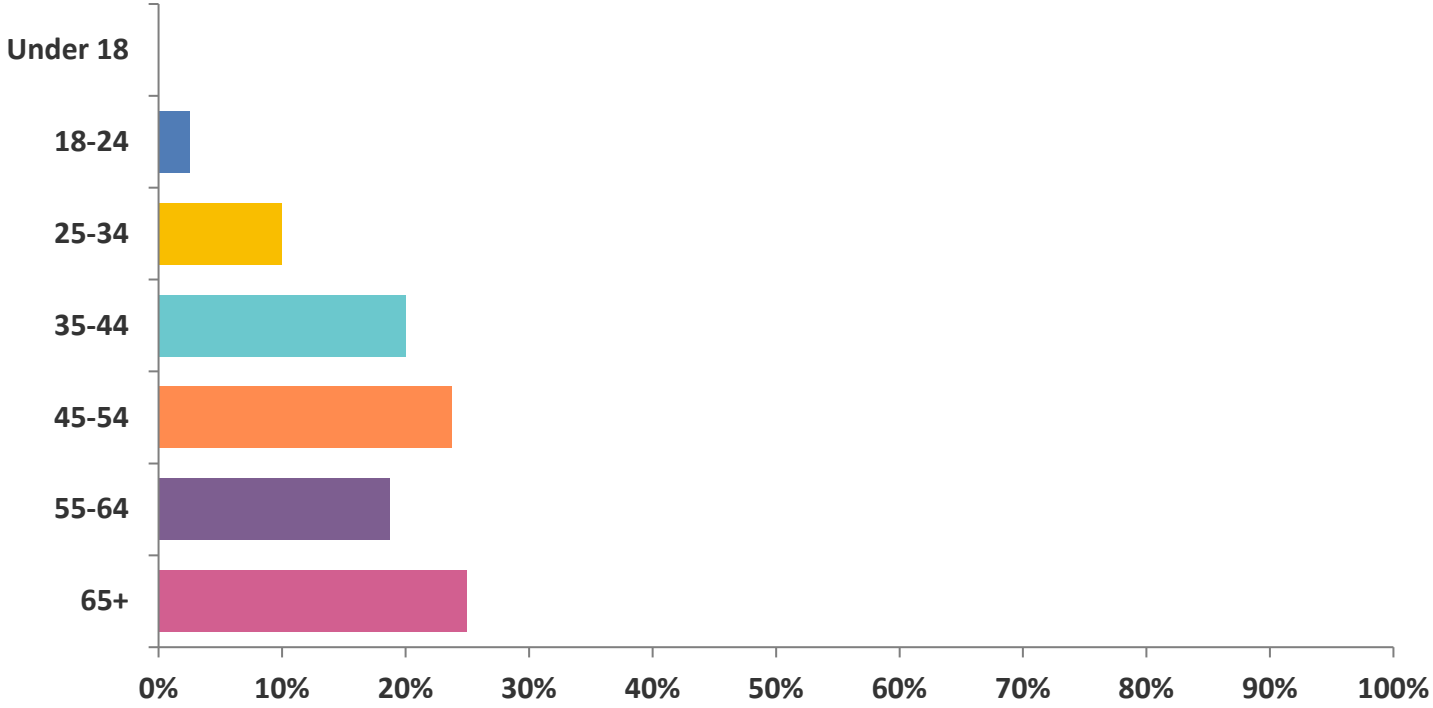
Question 4: What do you think is the single most important issue the City faces in terms of the infrastructure and services it provides? (Responses paraphrased)

- Floodplain and flood control
- Streets, water and emergency services
- Water and water quality
- Ambulance and stormwater
- Streets and lighting
- Ambulance service
- It's not infrastructure but amenities
- Storm drainage and streets
- Pave the rest of the streets
- Building subdivisions to bring in population
- Pave Wheatland Road
- Money and manpower
- Floodplain issues and investment in growth and staff
- Water and new fire hall
- Emergency services
- Hard water damages appliances and fixtures
- New fire station
- Paving road and connecting sidewalks
- Downtown streets and stormwater (ice buildup etc.)
- Drinking water
- Stormwater
- Water storage facilities
- Stormwater
- Water/sewer and floodplain mitigation
- Water
- We don't need anything if its going to raise taxes
- Pave Jefferson Street
- Growing population
- Maintain streets
- Clarkston is a mess lack of maintenance and stormwater
- Not providing necessary services to new growth
- Flooding
- Water
- Floodplain mitigation and streets
- Pave the streets and alleys
- Drinking water
- Cost associated with improvements
- Growth
- Floodplain
- City funded police
- Growth and its costs (2)
- Public health and safety
- Ambulance service
- Costs of infrastructure

Question 4: What do you think is the single most important issue the City faces in terms of the infrastructure and services it provides? (Responses paraphrased)

- Drinking water in relation to growth
- Emergency services
- Don’t know
- Drinking water quality and emergency services
- Law enforcement
- Money to pay for infrastructure
- Streets i.e. Talc Road
- Water and sewer to meet growth demands
- Keeping up with growth
- Managing growth
- Change the zoning so its easier to develop
- Water systems
- Emergency services
- Streets and stormwater
- Law enforcement
- Lower water/sewer rates. The City is the highest in the area.
- Streets and stormwater
- Paved streets and a sidewalk system
- Paving streets
- Water supply
- Senior center upgrade
- Senior center
- Streets
- Safe drinking water
- Good water and sewer

Question 5: What is your age?



Question 5: What is your age?

ANSWER CHOICES	RESPONSES	Total Responses
Under 18	0%	0
18-24	2.50%	2
25-34	10.0%	8
35-44	20.0%	16
45-54	23.75%	19
55-64	18.75%	15
65+	25.00%	20
TOTAL		80

Question 6: What street do you live on in the City?

STREET	RESPONSES PER STREET
Front	6
“Town”	5
Main	5
Ave East	5
Ave E	5
Ave	4
2nd	4
5th	3
3rd	3
Adams	4
W	3
West	3
“City”	3
Jefferson	6
East Cedar	3
N 1st Ave	1
E Neal	1
6th Ave E	1

Appendix C

Three Forks Buildout Analysis

Three Forks Buildout Analysis
July 2024

Lee Nellis, FAICP

Randy Carpenter, City Planner

What is Buildout Analysis?

Buildout analysis is a tool for understanding the consequences of decisions. It tells decision-makers approximately how many new households and how much additional commercial development they should anticipate as they decide how to invest in improving and expanding their community's infrastructure. It can also help them understand how local land use regulations shape growth and how those regulations might be made more effective in achieving community goals.

This buildout analysis is intended to support the people of Three Forks, MT as their city is increasingly impacted by the rapid growth of the Bozeman region and nearby Broadwater County. We begin with the regional context, then discuss the constraints that have limited growth in Three Forks and how those constraints may soon be lifted. That leads to the analysis. We describe the methodology used and the geography of growth in Three Forks, then calculate the potential for residential and commercial development. We conclude with a discussion of next steps.

Regional Population History

Three Forks is located in Gallatin County, MT, the population of which leapt from 32,505 to 118,957 between 1970 and 2020. The county seat, Bozeman (~25 minutes east of Three Forks on I-90), was a quiet college town of less than 20,000 in the early 1970s. It had grown to 53,293 by 2020 and is now the urban core of a metropolitan statistical area (MSA). The Bozeman MSA (which has the same boundaries as Gallatin County) has been growing four times more rapidly than either Montana or the U.S. during the past 50 years.

Residents of subdivisions in Broadwater County also generate demand for some of the services provided by the City of Three Forks (the county line is about two miles west via Montana 2). Broadwater County's population grew from 2,526 in 1970 to 6,774 in 2020, a rate of change that is moderate only when compared with the growth of the Bozeman MSA.

Regional Population Projections

Census estimates and population projections prepared for the State of Montana suggest that growth in Broadwater County accelerated after 2020, but will soon peak, then slow, with the population falling just under 7,000 by 2040. We do not believe that is what will happen. We think Three Forks will continue to be impacted by growth across the county line. See the discussion of methodology below.

Census estimates and population projections made by various agencies suggest that the Bozeman MSA will continue to grow. The 2022 *Greater Triangle Area Transportation Plan* provides a summary of projections for Gallatin County on page 38. The most accurate of those forecast population growth rates approaching three percent per year. The transportation plan adopts an annual growth rate of 2.50% for its projections. That is about the same as the annual growth rate during the past 50 years and consistent with the most recent estimate made by the Bureau of the Census, which suggests that growth continued at a rate of 2.48%

per year between 2020 and 2022. At 2.50% per year, more than 73,000 people will be added to the MSA's population by 2040.

What will growth of that magnitude mean for the region? Can you imagine adding the current population of Missoula and all its residents' demands for public services and facilities to the Bozeman MSA in less than 20 years?

Slower Change in Three Forks

The questions addressed by this analysis are not quite that challenging, but the people of Three Forks must make important choices about how their city will manage growth. It has, so far, changed at a leisurely pace while the MSA population was exploding. Three Forks had a population of 1,188 in 1970 and only reached 1,989 by 2020. The growth rate has been about one-quarter that of the MSA's, a contrast which suggests that Three Forks' growth has somehow been constrained.

Commuting Time? The most obvious constraint on Three Forks' growth might seem to be the time needed to commute to jobs in or near Bozeman. But the national average commuting time in 2020 was 26.6 minutes, which is a good approximation of how long it takes to drive to Bozeman. Given how much time Americans are willing to spend traveling to jobs, we do not believe that commuting time explains Three Fork's slower growth. This is especially true because, as *Envision Three Forks* (the city's 2022 growth policy, page 1-8), points out the cost of commuting has been counterbalanced by the lower cost of housing in Three Forks.

Infrastructure? Three Forks' infrastructure has not been a brake on growth. The wells serving the city did reach capacity, as defined by state regulations, in 2020, but a recently completed well will support some additional growth. Reaching buildout, as it is calculated in this analysis, will require more water and infrastructure improvements, but a limited availability of public facilities does not explain the slow growth of the past.

Building Sites! We believe that a shortage of available building lots has prevented Three Forks from experiencing a larger share of the region's growth. Every indicator suggests that there has been demand for housing. Approximately 100 dwelling units have been built (or at least approved) during the past decade, the residential vacancy rate is less than three percent, and only a few scattered vacant lots remain. We would expect new residential subdivisions to be created under these conditions, but they have not.

The Floodplain! The shortage of building lots is attributable to Three Forks' position in the landscape. It is on an alluvial plain created by the confluence of the Gallatin, Jefferson, and Madison Rivers; the three forks of the Missouri River. The largest single parcel of vacant land within the city and most of the surrounding lands are within the regulatory floodplain. Wetlands and a high-water table also limit development.

What if the Constraints are Lifted?

The City of Three Forks is proactively seeking to lift the constraints on its growth. It is drilling wells to improve and expand the water supply, and pursuing funding for a flood mitigation project that will open vacant land to development. It has also prepared a capital

improvement plan (CIP) to identify the need for future facilities. This analysis assumes that the natural constraints on Three Forks' growth will be lifted and systematically assesses the resulting potential for growth.

Methodology – Why Use Buildout Analysis?

Why is buildout analysis the best basis for facilities and land use planning? Why not rely on the population projections cited earlier in this document?

Those projections vary substantially, but all began with the same formula: natural increase ± migration = population. They are different because they rely on different assumptions about the terms of the equation. Calculating natural increase is straightforward (births minus deaths), so the critical assumption is the migration rate; the net movement of people into and out of the Bozeman MSA. But how does a forecaster know what the future migration rate will be? They don't know. They assume.

The most common assumption is that the migration rate will be about what it has been in the past. But what if, in 1974, one had assumed that Gallatin County would grow as it had been since the end of the Depression? A trendline projection would have set the county's 2020 population at less than 60,000, roughly half what it turned out to be!

Simple population projections can be remarkably inaccurate. The alternative is to build a model of factors that influence migration. Such a model might include housing costs and measures of the local appeal to in-migrants (some models use days of sunshine, for example). It might also include the "push" climate change is beginning to give to migration away from the coasts. Such a model would be complicated and hungry for data. Building it would be time-consuming and expensive. All of which would be fine if such models were consistently accurate, but they aren't. The dynamics of migration are too complex.

Population projections are also less likely to accurately allocate growth to small places that have specific constraints on development or where growth is driven by employment outside the community, both conditions that apply to Three Forks. This is well illustrated by the State's projection for Broadwater County, which shows its population beginning to fall in 2027. But why would the suburbanization of lands along US 287 that has accounted for the county's growth abruptly cease? It almost certainly won't. The State's projection apparently does not link the population of Broadwater County to growth in Lewis and Clark or Gallatin Counties. It incorporates recent Census counts – which are undeniable – but quickly returns to the migration rate it assumes for rural counties rather than recognizing a land-use trend that anyone who drives from Three Forks to Helena can plainly see.

Population projections are not sufficiently accurate to be a sound basis for the investment of millions of dollars in public facilities or for land-use planning that must focus not just on a small town, but on even smaller neighborhoods. Communities need a more grounded way to assess their potential growth. That is why we are using buildout analysis, which begins with a detailed understanding of local geography.

The Geography of Three Forks' Future

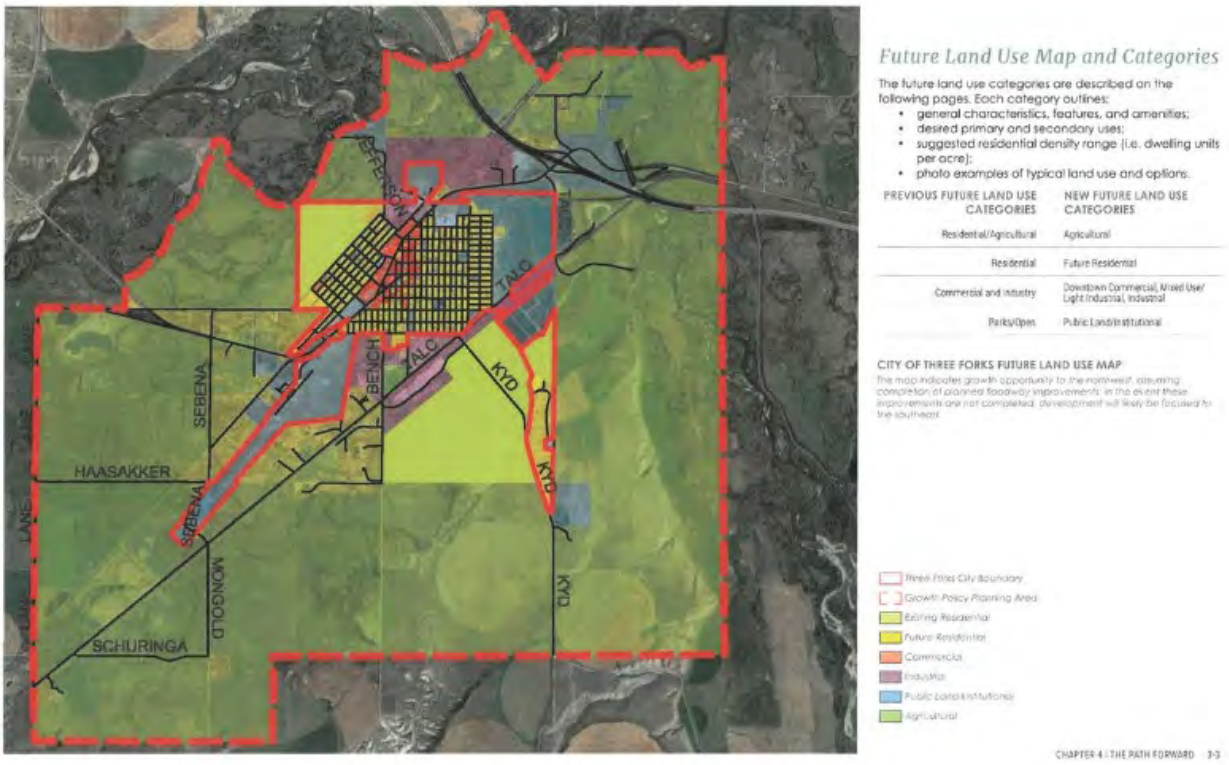
Envision Three Forks was adopted in 2022. It includes a Future Land Use map (page 3-1, reproduced below) that anticipates new housing in three areas.

First, *Envision Three Forks* encourages the infill of existing residential neighborhoods.

Second, *Envision Three Forks* anticipates construction of a flood control project that will open an approximately 92-acre parcel within the city limits – on the northwest side of Jefferson Street – to residential development.

Third, *Envision Three Forks* expects mixed-use, but mostly residential, development of a parcel of about 400 acres to the southeast.

It is the capacity of these lands to accommodate residential development that will determine Three Forks' future population and shape the decisions the city must make to serve its residents. A population projection would be helpful only if it suggested that the development capacity of those lands is greater than the region's growth will support. But no such projection will be forthcoming. It is more likely, judging by our experience, that the current growth projections for Gallatin County will be low.



Buildout Analysis: Area by Area

The first step in buildout analysis is to determine the areas to which it will be applied. We just did that. The residential growth areas listed above will be referred to as: 1) Residential Infill, 2) Northwest Residential, and 3) Southeast Residential. This analysis also addresses the potential for commercial growth within the city limits - in downtown Three Forks and along the adjoining highway corridor – and discusses the commercial potential of the areas shown as industrial on the future land use map.

Determining the development capacity of these areas requires data, local knowledge, and professional insight. We have applied decades of planning experience to the study of aerial images, field observation, picking apart the property tax rolls, reading *Envision Three Forks,* and accounting for the existing zoning regulations. We have also relied on the City staff's amazingly detailed knowledge of property ownership and building activity. The first draft of this document was subject to extensive review that resulted in numerous improvements:

> City staff - Kelly Smith and Crystal Turner - provided questions and comments on December 11, 2023. We responded on February 7, 2024. Many staff comments have been incorporated into this second draft.
>
> Jessica Salo told us that Great West Engineering had no significant comments on the draft on December 12, 2023. We began corresponding with Great West on how to integrate the buildout analysis into the CIP at the end of February 2024.
>
> The first draft of this analysis was presented to the Mayor and City Council on December 12, 2023, resulting in a general discussion of growth possibilities and the suggestion that additional density scenarios might be helpful.
>
> The IFAC met to further discuss this document on January 24, 2024. This meeting made it clear that higher density scenarios should be prepared. It also led to January 30, 2024, correspondence from IFAC member Mike Stenberg conveying his client's current understanding of the potential of their property. Informal conversations with the developers of the Southeast Residential area have continued.

Residential Infill

> Support infill and strategic development over sprawl.
>
> *Envision Three Forks*, 2022, page 2-5

The infill of existing neighborhoods is an incremental process that involves decisions by dozens of landowners over many years. We have identified infill sites using the resources listed above. We cannot, however, anticipate whether and when a landowner will make an infill lot available.

That uncertainty is mitigated by the fact that infill development is served by existing streets and utilities. The demands it will generate must be factored into infrastructure planning, but they will be small. We think it is reasonable to estimate continuing residential infill at 60 units scattered throughout Three Forks' existing neighborhoods. At least one-third of this

infill will be in the form of single-family dwellings, but some vacant parcels are big enough to accommodate a duplex or small multi-family building. Revising the zoning regulations to be more consistent with the growth policy goal of encouraging infill could – by allowing the use of smaller lots – bump the estimated infill potential up to around 70 units.

The Impact of Accessory Dwellings? Montana law now requires cities to permit one accessory dwelling unit (ADU) with any single-family dwelling. But allowing ADUs does not magically make them appear. Homeowners must have both the inclination to create an ADU and the means to do so. Anticipating how many ADUs might be added is even more difficult than estimating infill. Three Forks should monitor the number of permits issued for ADUs and respond, as necessary, if that number becomes significant.

Northwest Residential

An approximately 92-acre vacant area along the northwest side of Jefferson Street will be almost completely removed from the floodplain by the proposed flood mitigation project. Natural limitations will remain in the form of wetlands and a high water table, but this area can support significant residential development within walking distance of downtown.

Envision Three Forks anticipates that new residential development will be at a minimum gross density of approximately five dwelling units per acre (5 du/A, see page 3-2). We are deducting 65 acres from this parcel to account for natural constraints, leaving space sufficient for approximately 135 dwelling units at that density. We acknowledge some uncertainty about the extent of the wetlands here. A detailed wetlands delineation might change the potential buildout.

Buildout Scenarios. We used a development yield of five dwelling units per acre for the first draft of this analysis. Review and discussion of that effort made it clear that there was considerable interest in the possibility of higher density development. We responded by calculating two higher density scenarios, as explained below.

What Does Development at 5 du/A Look Like?

This analysis will be more meaningful if readers have an idea of what development at 5 du/A (or any other density) might look like. Remember first that density is an average, not a minimum lot size. It includes not only homes, yards, and accessory buildings, like detached garages, but also the streets serving the homes and public spaces like parks or stormwater ponds.

It is possible to attain 5 du/A or higher densities in several different ways. There is no need for the configuration of buildings to be monotonously uniform. The City's goal in permitting residential development should be to encourage creativity, diversity, and affordability while maintaining compatibility where new homes adjoin existing. Appendix A offers examples to help people visualize buildout at different densities.

Southeast Residential

Three Forks Development, LLC is actively planning residential and limited commercial development on about 400 acres southeast of the city. A small portion of that property is already within the city limits. The remaining acreage will have to be annexed before municipal services can be extended to it. There are substantial natural constraints in the form of wetlands, wet soils, and the difficulties of draining essentially flat land, but deducting the wetlands and the area the developer is considering for commercial use leaves roughly 176 acres for residential development. At five dwelling units per acre, that yields about 880 units. Recent conversations with the developer's representatives suggest that the actual buildout may be less due to the natural constraints on site drainage.

Buildout Scenarios. As noted above, buildout analysis facilitates discussion of alternative development patterns. That is especially relevant for this area because wetlands, industrial uses, and a railroad separate it from the traditional development pattern of Three Forks. It will be a distinct neighborhood with minimal concerns about compatibility with neighboring homes. A higher average gross density here might make more affordable housing possible.

Higher Densities?

Creating higher density development scenarios for Three Forks is challenging. The city's current zoning ordinance does not permit higher density development except via case-by-case review (conditional use permit or planned unit development), so it does not specify densities that could be used in such calculations. The growth policy, *Envision Three Forks*, offers a mixed message, suggesting an upper limit of 15 du/A gross density on the Future Land Use Map, but saying elsewhere (see page 3-2) that density is anticipated to be "slightly" higher.

We have not calculated total buildout at 15 du/A. We think extensive development at that density could erode Three Forks' small-town character. Our experience, which seems consistent with recent development in Three Forks, suggests that developers are likely to propose a mix of housing types that results in gross densities between 5 and 12 du/A. Depending on developers' perceptions of the market (perceptions that are subject to change through time) and how the city updates its zoning regulations, this mix may include single-family dwellings on both relatively large and smaller lots; attached housing - like duplexes or town homes - that has ground level access to each unit; and larger apartment or condominium buildings.

We have calculated buildout at 7.5 du/A and 11.5 du/A. We think these densities illustrate a realistic range of possibilities and will be useful as a basis for discussion. The higher density scenarios show that buildout on the Northwest Residential parcel could approach 300 dwelling units and that up to 10 times that many could potentially be built in the Southeast Residential area.

Accommodating any of the three buildout scenarios will require changes in Three Forks' land use regulations. The scenarios also have different impacts on municipal facilities. The 11.5 du/A scenario, for example, probably requires construction of a new sewage treatment plant.

Commercial Infill

The addition of hundreds of new dwelling units will expand business opportunities in Three Forks, but calculating the extent of commercial development that might occur is challenging. We divided the task, looking first at the potential for new commercial uses within the city limits and then discussing potential additions.

Three Forks currently has roughly 230,000 square feet of retail and service commercial building space within its commercial zoning districts; a total area not much larger than a typical Walmart. At least five percent of that space is vacant and considerably more appears to be underutilized. It is difficult to project how much of what is vacant or underutilized will be made available for re-development.

Beyond the existing building stock, there is not much vacant commercial land within the city limits. We found just under than seven acres, some downtown, some along the highway, almost all of it in parcels too small to be suitable for the larger commercial uses (another grocery store? a drug store?) that might be supported by the potential residential buildout. A recent zoning map amendment has added an acre of commercially zoned land, but that area is not vacant; existing structures will have to either be adapted to commercial use or razed.

We do not think the configuration of commercial space in Three Forks can accommodate much more than 150,000 square feet of commercial re-development and development, almost all of which would have to be in the form of small retail and service uses. This number could grow if existing industrial buildings came into play. Some rezoning of residential lots might also occur. There is no reasonable way to quantify those possibilities, but we add 10,000 square feet to commercial buildout to acknowledge that they may have an impact. The uncertainty in this analysis of the potential extent of commercial infill is somewhat mitigated by the fact that new businesses in existing vacant buildings and on underutilized sites will be served by existing streets and utilities. It should be noted, though, that the existing utilities (water and wastewater) may require improvement to serve commercial infill.

Residential Too? Downtown Three Forks has excellent potential for the construction or re-development of buildings with ground floor commercial and dwelling units above. This would be a desirable land use pattern, contributing to the vitality of the central business district and to housing affordability. Adding more dwelling units downtown could be encouraged by a change in off-street parking requirements. Three Forks should also allow business owners to address the impacts of housing costs on their labor supply by permitting employee housing on commercial and industrial premises where it will not be exposed to noise, glare, fumes, or other hazards. It is impossible to project how much or when housing will be created in these ways. We allocate 20 dwelling units to commercial infill to account for the possibility.

Industrial Additions

The Future Land Use Map that appears above anticipates new industrial uses on vacant and underutilized lands adjacent to the city. It also looks ahead to what it calls "Mixed Use/Light Industrial" uses, which could include retail and service enterprises. The map does not, however, designate an area for that category of development. It is assumed to be within the areas allocated to "Industrial."

The mostly vacant parcels designated "Industrial" total about 270 acres. Their development potential is affected by natural constraints (wetlands, high water table), limited access to streets and utilities, and in places, the possibility for conflict with nearby residential uses. There is substantial development potential despite the constraints. At just 25% lot coverage, there could be nearly three million square feet of new buildings!

While the Future Land Use Map shows it as residential, the developers of the Southeast Residential area have indicated that they may propose commercial use of roughly 24 acres. This probably makes sense as a potential buffer from the railroad and nearby industrial uses. Preliminary conversations with the developer's representatives suggest that the most likely commercial use to be proposed is storage, which will have minimal infrastructure needs.

Calculating the public facilities and services demands of potential commercial development on the mapped "Industrial" lands would require information on the proposed type, extent, and pattern of development that does not exist at this time. Fortunately, these parcels must be annexed to obtain utilities and services and that will allow the City to take a case-by-case approach to financing and installing the necessary infrastructure. Properly implementing such a process will require ordinance amendments.

Three Forks Buildout Analysis Results

The results of building out Three Forks at 5/du/A are summarized in Table 1 and discussed below. The results of the higher density scenarios we calculated are given in Appendix B.

Table 1

	dwelling units	square feet commercial
Residential Infill	60	0
Northwest Residential	135	0
Southeast Residential	880	0
Southeast Commercial	0	case-by-case
Commercial Infill	20	160,000
Industrial Additions	case-by-case	case-by-case
Total Buildout	1,095	160,000

'Case-by-Case' indicates that buildout will be determined at the time of annexation.

This table shows that the number of dwelling units in Three Forks could double. There are currently 911 residential water connections. This analysis suggests that 1,095 dwelling units could be added via infill and in the identified growth areas.

Will that happen? All we can say for sure is that, if the constraints on development are lifted as discussed earlier in this document, and if the City provides sufficient infrastructure, it could. The land base exists.

Is it a reasonable expectation? The transportation plan cited above (see page 39 of that document) projects the addition of well over 34,000 new dwelling units to Gallatin County by 2040. Is it reasonable to expect that roughly 3.0% of those new units could be in Three Forks?

Three Forks had 1.67% of the county's dwellings in 2020. If building lots and infrastructure are made available, it seems reasonable that the city's share of the county's housing stock could increase by less than 1%. Three Forks's share was over 3% in 1970.

How does buildout translate into population? Adding 1,095 dwellings at the 2020 household size for Gallatin County (Three Forks' 2020 household size was a bit larger, but we expect it to converge with the county's) and assuming that a larger supply of housing will lead to a healthier vacancy rate of five percent, yields a buildout population of about 4,825, about 2,800 more than now.

What would the City's population be at higher densities? Three Forks could permit densities higher than 5 du/A to help keep housing more affordable for its hard-working residents.

At 7.5 du/A, well-designed development will still feel spacious (see the example in Appendix A). The City's population would top out between 5,880 and 6,140, returning it to about the same share of the Bozeman MSA's population that it had in 1970.

At 11.5 du/A, Three Forks will begin to feel suburban, but there will also be more housing choices and business opportunities. The buildout population would be between 7,850 and 8,240, and comprise just over four percent of the Bozeman MSA's population.

How soon will all this growth happen? Buildout analysis does not predict dates. It just assesses development potential. But even if Three Forks merely maintains its share of the Bozeman MSA's population it would have a 2040 population over 3,200. 1,000 new residents and more than 400 dwelling units would have been added. That approaches 40% of the potential buildout at 5 du/A.

What Should Three Forks Plan For?

We believe that Three Forks is an amenable small town, attractive to many. If building lots and public facilities are made available, and if a substantial differential in housing costs between Three Forks and Bozeman persists, the city's share of the region's population should be expected to increase. A 2040 population of around 4,500 should not surprise anyone. It would not be an unreasonable basis for planning.

It is difficult, though, to anticipate the pace of development. The flood mitigation project will have to be fully funded, at least, and probably, underway before developers invest in the Northwest Residential area. The state of the national economy can suppress construction, even where there is demand. Some caution in projecting buildout is justified.

Our Recommendation

Based on our calculations, and consistent with the positive discussion of growth at the City Council and IFAC meetings, here are our recommendations.

First, this analysis should be updated as uncertainties resolve. The most significant open question right now is about the flood mitigation project. Will it be funded? If it is,

when will it be completed? How will landowners respond? What type of development will be proposed?

Beyond flood mitigation, the CIP prepared by Great West Engineering calls for more detailed infrastructure planning. The engineering studies it proposes should begin with this analysis, but their findings about the feasibility and costs of new facilities could necessitate adjustments in the buildout numbers.

For now, we recommend that Three Forks adopt the 5 du/A residential buildout scenario as a basis for infrastructure planning but be prepared to re-evaluate and revise that decision as evidence accumulates. We think it would be wise to adopt a resolution that requires an annual review of this analysis.

Given the demand for goods and services that so many new homes will generate, Three Forks should do what it can to encourage commercial development downtown and in the adjoining commercial area but be prepared to annex additional land for which commercial and industrial developers will provide the infrastructure, including off-site improvements as necessary.

The 5 du/A buildout scenario is a reasonable basis for infrastructure planning only until the evidence indicates otherwise. It should be adjusted as new facilities come online and planning studies suggest. It should also be adjusted in response to proposals for development on the lands designated for growth by the Future Land Use Map adopted in *Envision Three Forks*. This will require the city to adopt land use regulations that can effectively guide substantial growth. The current zoning ordinance assumes that change, if any, will be incremental. Its basic provisions (setbacks and other dimensional standards) can be retained for existing neighborhoods, but it is not up to the task ahead.

Next Steps?

The "Next Steps" from the drafts of this document have been retained and expanded to show how this analysis evolved to the point of publication in the CIP.

Some readers may have been in shock over the potential for change in Three Forks. The first step in responding to this analysis was to recover from that. The City's best course is to proactively plan for growth, as it has done with the adoption of the CIP.

The second step was to review this document and decide whether what we have offered is sufficient. The first draft was substantially improved by comments from City staff and the IFAC. More detailed information should be added as the engineering studies called for in the CIP are completed.

The third step was to have a community conversation about this analysis and its implications. Is doubling (or more) Three Forks' population by 2040 desirable? What tradeoffs are involved? What public investments will have to be made? How will the growth policy and zoning regulations have to be changed? The staff. IFAC, Mayor and Council, and the City's engineers have all been involved in discussing these questions.

The fourth step – now complete - was to incorporate the results of the final buildout analysis into the CIP that was prepared for the city by Great West Engineering and into the engineering studies recommended by that plan. It will also be necessary to incorporate this buildout analysis and the CIP into the Service Area Report that is required by state law (MCA 7-6-1602.2) as a basis for charging impact fees.

Fifth, there should be a community conversation about how the existing land use regulations will be replaced in anticipation of the coming growth. This analysis has mentioned three specific needs; accommodating higher densities, adjusting downtown parking requirements, and adopting a procedure for determining and funding the infrastructure impacts of larger developments. There are undoubtedly more. The city has contracted for work to begin on a new set of regulations in September 2024.

Thank You!

Our last step is to thank everyone who participated in this effort for their support. We believe the people of Three Forks are capable of successfully meeting the challenges that are presented by their community's growth and look forward to offering further support to the city.

Resources Used in Preparing this Document

The data used in the *Three Forks Buildout Analysis* come from the primary sources listed below or field observations.

Population and housing data and projections come from the U.S. Bureau of the Census, the Montana Census and Economic Information Center, and the draft *Greater Triangle Transportation Plan* prepared for Gallatin County.

For a Census profile of Three Forks go to:

https://data.census.gov/profile/Three_Forks_city,_Montana?g=160XX00US3073975.

There is a useful interactive population and housing dashboard for Montana cities and counties at:

https://ceic.mt.gov/People-and-Housing/Population.

Find the draft *Greater Triangle Area Transportation Plan* at:

https://www.triangletransportationplan.com/

Three Forks' adopted growth policy appears at https://www.threeforksmontana.us/. Just follow the "Online Documents" link from the City's home page.

Land parcel data come from the interactive map and parcel records provided by Montana Cadastral at: https://svc.mt.gov/msl/mtcadastral/.

Our analysis of natural constraints is based on the and the Web Soil Survey, https://websoilsurvey.nrcs.usda.gov/app/.

Appendix A – Density Examples & Tour

5 Dwelling Units Per Acre, Gross Density

Here is an example of attached housing at roughly five dwelling units per acre. This project is all attached, mostly four-unit buildings with two duplexes. It features detached garages for most units and private recreational space. This project appears quite spacious from the air because it is surrounded by open land on two sides.

7.5 Dwelling Units Per Acre, Gross Density

Here is an example of single-family detached housing at roughly 7.5 dwelling units per acre. This is about as dense as detached homes get, but there is still green space, including a storm water pond. This project is served by an extensive trail system allowing residents to walk or bike to parks. Dining, groceries, and other shopping are within a ten-minute walk.

Three Forks Planning Board Density Tour

The Three Forks Planning Board toured numerous residential developments in the Bozeman area on June 6, 2024. The intent of the tour was to give participants a "feel" for residential development at different densities and types (single-family detached, townhomes, condos,

and apartments). A sampling of some of those residential projects is shown below, with photos and density data.

Gran Cielo Townhomes: 24 homes per acre

Blackwood Cottages: 16 homes per acre

Baxter Meadows:
13.4 homes
per acre

Baxter Meadows:
9 homes per acre

Baxter Meadows:
7.5 homes per acre

Gooch Hill Meadows:
5 homes per acre

Woodlyn Park:
4 homes per acre

Here are links to websites that offer additional illustrations of different densities.

https://metrocouncil.org/Transportation/Planning-2/Key-Transportation-Planning-Documents/Transportation-Policy-Plan/The-Adopted-2040-TPP-(1)/Land-Use-Illustrations/Density-of-Development-Examples.aspx

https://www.theurbanist.org/2017/05/04/visualizing-compatible-density/

Appendix B – Results of Higher Density Buildout Scenarios

Three Forks Buildout at 7.5 du/A

	dwelling units	square feet commercial
Residential Infill	60	0
Northwest Residential	200	0
Southeast Residential	1,320	0
Southeast Commercial	--	case-by-case
Commercial Infill	20	160,000
Industrial Additions	case-by-case	case-by-case
Total Buildout	1,605	160,000

Case-by-Case indicates that buildout will be determined at the time of annexation.

Three Forks Buildout at 11.5 du/A

	dwelling units	square feet commercial
Residential Infill	60	0
Northwest Residential	310	0
Southeast Residential	2,020	0
Southeast Commercial	--	case-by-case
Commercial Infill	20	160,000
Industrial Additions	case-by-case	case-by-case
Total Buildout	2,410	160,000

Case-by-Case indicates that buildout will be determined at the time of annexation.

Appendix D

Project Cost Estimates

City of Three Forks

Water, Wastewater, or Stormwater Preliminary Engineering Report (PER)

Estimated Budget by Activity

Activity	Estimated Hours	Estimated Cost
Kick-Off Meeting and Scoping A meeting will be scheduled with Client and other stakeholders to discuss the project goals, roles and responsibilities, communication preferences, schedule, public outreach, and overall expectations.	16	$ 3,200
Background Information and Field Work All available facility plans or reports, existing system mapping, and other pertinent information will be gathered, and a field survey of the system to document known concerns will be conducted with Client personnel. Necessary field work (e.g. hydrant testing, flow monitoring, sludge sampling, etc.) will also be scheduled and coordinated with Client.	32	$ 6,400
Analysis of Existing System The existing system will be inventoried and modeled as appropriate. Existing and design populations and flows will be quantified, and an evaluation of regulatory compliance will be completed. All noted deficiencies with the existing system will be categorized.	100	$ 20,000
Alternative Development Alternatives to address deficiencies identified in the analysis of the existing system will developed to a "charts, graphs, and table" stage that includes draft schematic drawings and estimates for both capital and O&M costs. The "charts, graphs, and tables" will be reviewed with Client and updated based upon review comments.	100	$ 20,000
Draft PER A draft PER following the requirements of the latest version of the *Uniform Application for Montana Public Facility Projects* will be compiled and provided to Client for review. The draft PER will include a decision matrix to rank and prioritize alternatives developed to address identified deficiencies and potential funding sources.	60	$ 12,000
Public Outreach Public outreach as defined in the initial kick-off and scoping meetings will be completed. At a minimum, one public hearing to present the finding and recommendations of the PER will be conducted.	32	$ 6,400
Environmental Review Once a preferred alternative is identified in the draft PER, letters detailing the proposed improvements will be sent to local, state, and federal agencies requesting comment. A Uniform Environmental Checklist will then be completed utilizing information gathered during the alternative development, input received from the public outreach process, and agency comments.	30	$ 6,000
Final PER Based upon review comments from the client on the draft PER and input from the public outreach efforts and environmental review, Great West will finalize the PER and provide hard and/or electronic copies of the final document to the client and applicable funding agencies, as requested.	30	$ 6,000
Total Estimated Cost		**$ 80,000**

Note: A varied team of engineers, technicians, GIS and CAD specialists, and administrative support will be assigned to the project. An average hourly rate of $200 per hour is assumed to calculate the estimated cost, which includes an allowance for travel expenses, production, and other miscellaneous costs.

OPINION OF PROBABLE COST CITY OF THREE FORKS WATER MAIN REPLACEMENTS					
#	BID ITEM	QTY	UNITS	UNIT PRICE [1]	TOTAL
1	Exploratory Excavation	40	HR	$ 450.00	$ 18,000
2	6" Polyvinyl Chloride (PVC) Water Main	5,000	LF	$ 130.00	$ 650,000
3	6" Gate Valve with Valve Box	20	EA	$ 3,200.00	$ 64,000
4	3/4" Water Service Connection	70	EA	$ 2,200.00	$ 154,000
5	¾" Polyethylene (PE) Water Service Line	2,600	LF	$ 85.00	$ 221,000
6	Connect to Existing Water Main	4	EA	$ 3,600.00	$ 14,400
7	Fire Hydrant w/Auxiliary Gate Valve	9	EA	$ 9,000.00	$ 81,000
8	Fittings	20	EA	$ 900.00	$ 18,000
9	Type A Surface Restoration (Asphalt)	5,000	LF	$ 50.00	$ 250,000
10	Temporary Water Service	1	LS	$ 30,000.00	$ 30,000
Direct Construction Subtotal					$ 1,500,000
Mobilization				10%	$ 150,000
Traffic Control				1%	$ 15,000
Construction Subtotal					$ 1,665,000
Construction Cost Inflated to [2]		2030		3.0%	$ 2,048,000
Contingency				20%	$ 410,000
Permitting					$ -
Land Acquisition					$ -
Geotechnical Investigation					$ 20,000
Engineering Design				10%	$ 245,800
Engineering Construction				10%	$ 245,800
Grant Admin, Legal, & Administrative				3%	$ 73,740
TOTAL					$ 3,043,340

[1] *Estimated unit costs are based upon estimates from suppliers and bid tabs for similar projects throughout Montana.*

[2] *The ENR average Construction Cost Index is +2.32% (as of September 2023), so capital costs are projected to the anticipated construction date using a 3% inflation rate.*

OPINION OF PROBABLE COST CITY OF THREE FORKS TRANSMISSION IMPROVEMENTS					
#	BID ITEM	QTY	UNITS	UNIT PRICE [1]	TOTAL
1	Exploratory Excavation	40	HR	$ 450.00	$ 18,000
2	12" Polyvinyl Chloride (PVC) Water Main	3,200	LF	$ 160.00	$ 512,000
3	12" Gate Valve with Valve Box	4	EA	$ 6,000.00	$ 24,000
4	Connect to Existing Water Main	2	EA	$ 3,600.00	$ 7,200
5	Fire Hydrant w/Auxiliary Gate Valve	3	EA	$ 9,000.00	$ 27,000
6	Fittings	10	EA	$ 900.00	$ 9,000
7	12" Casing Under Railroad	200	LF	$ 350.00	$ 70,000
8	Type C Surface Restoration (Native Surface)	3,200	LF	$ 15.00	$ 48,000
9	Temporary Water Service	1	LS	$ 30,000.00	$ 30,000
Direct Construction Subtotal					$ 745,000
Mobilization				10%	$ 75,000
Traffic Control				1%	$ 7,000
Construction Subtotal					$ 827,000
Construction Cost Inflated to [2]		2026		3.0%	$ 904,000
Contingency				20%	$ 181,000
Permitting					$ 10,000
Land Acquisition					$ 10,000
Geotechnical Investigation					$ 20,000
Engineering Design				10%	$ 108,500
Engineering Construction				10%	$ 108,500
Grant Admin, Legal, & Administrative				3%	$ 32,550
TOTAL					$ 1,374,550

[1] *Estimated unit costs are based upon estimates from suppliers and bid tabs for similar projects throughout Montana.*

[2] *The ENR average Construction Cost Index is +2.32% (as of September 2023), so capital costs are projected to the anticipated construction date using a 3% inflation rate.*

OPINION OF PROBABLE COST CITY OF THREE FORKS COLLECTION SYSTEM IMPROVEMENTS					
#	BID ITEM	QTY	UNITS	UNIT PRICE [1]	TOTAL
1	Exploratory Excavation	20	HR	$ 450.00	$ 9,000
2	8" PVC Sewer Main	5,000	LF	$ 150.00	$ 750,000
3	Reconnect Sewer Services	70	EA	$ 650.00	$ 45,500
4	Manholes	16	EA	$ 8,000.00	$ 128,000
5	Type A Surface Restoration (Asphalt)	5,000	LF	$ 50.00	$ 250,000
Direct Construction Subtotal					$ 1,183,000
Mobilization				10%	$ 118,000
Traffic Control				1%	$ 12,000
Construction Subtotal					$ 1,313,000
Construction Cost Inflated to [2]			2028	3.0%	$ 1,522,000
Contingency				20%	$ 304,000
Permitting					$ -
Land Acquisition					$ -
Geotechnical Investigation					$ 20,000
Engineering Design				10%	$ 182,600
Engineering Construction				10%	$ 182,600
Grant Admin, Legal, & Administrative				3%	$ 54,780
TOTAL					$ 2,265,980

[1] *Estimated unit costs are based upon estimates from suppliers and bid tabs for similar projects throughout Montana.*

[2] *The ENR average Construction Cost Index is +2.32% (as of September 2023), so capital costs are projected to the anticipated construction date using a 3% inflation rate.*

OPINION OF PROBABLE COST

CITY OF THREE FORKS

TRUNKLINE UPSIZING

#	BID ITEM	QTY	UNITS	UNIT PRICE [1]	TOTAL
1	16-inch PVC	4,500	LF	$ 300.00	$ 1,350,000
2	Dewatering	1	LS	$ 70,000.00	$ 70,000
3	Type A Surface Restoration (Asphalt)	4,500	LF	$ 50.00	$ 225,000
4	Manholes	20	EA	$ 8,000.00	$ 160,000
Direct Construction Subtotal					$ 1,805,000
Mobilization				10%	$ 181,000
Traffic Control				1%	$ 18,000
Construction Subtotal					$ 2,004,000
Construction Cost Inflated to [2]		2029		3.0%	$ 2,393,000
Contingency				20%	$ 479,000
Permitting					$ 10,000
Land Acquisition					$ -
Geotechnical Investigation					$ 20,000
Engineering Design				10%	$ 287,200
Engineering Construction				10%	$ 287,200
Grant Admin, Legal, & Administrative				3%	$ 86,160
TOTAL					$ 3,562,560

[1] *Estimated unit costs are based upon estimates from suppliers and bid tabs for similar projects throughout Montana.*

[2] *The ENR average Construction Cost Index is +2.32% (as of September 2023), so capital costs are projected to the anticipated construction date using a 3% inflation rate.*

OPINION OF PROBABLE COST

CITY OF THREE FORKS

NEW LIFT STATION AND FORCE MAIN

#	BID ITEM	QTY	UNITS	UNIT PRICE [1]	TOTAL
1	Wet Well Rehab.	1	EA	$ 150,000.00	$ 150,000
2	Pumps	3	EA	$ 125,000.00	$ 375,000
3	Electrical	1	LS	$ 70,000.00	$ 70,000
4	Backup Generator	1	EA	$ 300,000.00	$ 300,000
5	Earthwork	1	LS	$ 50,000.00	$ 50,000
6	Fencing	120	LF	$ 80.00	$ 9,600
7	Piping and Fittings	4,000	LF	$ 85.00	$ 340,000
Direct Construction Subtotal					$ 1,295,000
Mobilization				10%	$ 130,000
Traffic Control				1%	$ 13,000
Construction Subtotal					$ 1,438,000
Construction Cost Inflated to [2]		2028		3.0%	$ 1,667,000
Contingency				20%	$ 333,000
Permitting					$ 10,000
Land Acquisition					$ -
Geotechnical Investigation					$ 20,000
Engineering Design				10%	$ 200,000
Engineering Construction				10%	$ 200,000
Grant Admin, Legal, & Administrative				3%	$ 60,000
TOTAL					$ 2,490,000

[1] *Estimated unit costs are based upon estimates from suppliers and bid tabs for similar projects throughout Montana.*

[2] *The ENR average Construction Cost Index is +2.32% (as of September 2023), so capital costs are projected to the anticipated construction date using a 3% inflation rate.*

OPINION OF PROBABLE COST

CITY OF THREE FORKS

WWTP EXPANSION

#	BID ITEM	QTY	UNITS	UNIT PRICE [1]	TOTAL
1	Earthwork	230,000	CY	$ 5.00	$ 1,150,000
2	60 mil HDPE Liner	600,000	SF	$ 0.85	$ 510,000
3	Aeration Equipment	1	LS	$ 500,000.00	$ 500,000
4	Air Line	1	LS	$ 150,000.00	$ 150,000
5	Process Piping	1	LS	$ 250,000.00	$ 250,000
Direct Construction Subtotal					$ 2,560,000
Mobilization				10%	$ 256,000
Traffic Control				1%	$ 26,000
Construction Subtotal					$ 2,842,000
Construction Cost Inflated to [2]		2028		3.0%	$ 3,295,000
Contingency				20%	$ 659,000
Permitting					
Land Acquisition					
Geotechnical Investigation					
Engineering Design				10%	$ 395,400
Engineering Construction				10%	$ 395,400
Grant Admin, Legal, & Administrative				3%	$ 118,620
TOTAL					$ 4,863,420

[1] *Estimated unit costs are based upon estimates from suppliers and bid tabs for similar projects throughout Montana.*

[2] *The ENR average Construction Cost Index is +2.32% (as of September 2023), so capital costs are projected to the anticipated construction date using a 3% inflation rate.*

OPINION OF PROBABLE COST

CITY OF THREE FORKS

POLISHING REACTOR EXPANSION

#	BID ITEM	QTY	UNITS	UNIT PRICE [1]	TOTAL
1	Module/Media	1	LS	$ 100,000.00	$ 100,000
2	Grating	1,000	SF	$ 100.00	$ 100,000
3	Formwork	1,600	SF	$ 20.00	$ 32,000
4	Steel	10,200	LBS	$ 5.00	$ 51,000
5	Concrete	600	CY	$ 500.00	$ 300,000
6	Air Line	200	LF	$ 25.00	$ 5,000
7	Aeration Blowers	1	LS	$ 100,000.00	$ 100,000
Direct Construction Subtotal					$ 688,000
Mobilization				10%	$ 69,000
Traffic Control				1%	$ 7,000
Construction Subtotal					$ 764,000
Construction Cost Inflated to [2]		2028		3.0%	$ 886,000
Contingency				20%	$ 177,000
Permitting					
Land Acquisition					
Geotechnical Investigation					
Engineering Design				10%	$ 106,300
Engineering Construction				10%	$ 106,300
Grant Admin, Legal, & Administrative				3%	$ 31,890
TOTAL					$ 1,307,490

[1] *Estimated unit costs are based upon estimates from suppliers and bid tabs for similar projects throughout Montana.*

[2] *The ENR average Construction Cost Index is +2.32% (as of September 2023), so capital costs are projected to the anticipated construction date using a 3% inflation rate.*

OPINION OF PROBABLE COST CITY OF THREE FORKS RV DUMP STATION					
#	BID ITEM	QTY	UNITS	UNIT PRICE [1]	TOTAL
1	8-inch PVC	400	LF	$ 150.00	$ 60,000
2	Manholes	2	EA	$ 8,000.00	$ 16,000
3	Type A Surface Restoration (Gravel)	400	LF	$ 30.00	$ 12,000
4	1,500 Gallon Septic Tank	1	LS	$ 7,000.00	$ 7,000
5	Ozone Enhanced Aeration Unit	1	LS	$ 60,000.00	$ 60,000
6	Electrical	1	LS	$ 5,000.00	$ 5,000
7	Connect to Existing Manhole	1	EA	$ 4,000.00	$ 4,000
8	Site Work	1	LS	$ 20,000.00	$ 20,000
Direct Construction Subtotal					$ 184,000
Mobilization				10%	$ 18,000
Traffic Control				1%	$ 2,000
Construction Subtotal					$ 204,000
Construction Cost Inflated to [2]		2026		3.0%	$ 223,000
Contingency				20%	$ 45,000
Permitting					
Land Acquisition					
Geotechnical Investigation					
Engineering Design				10%	$ 26,800
Engineering Construction				10%	$ 26,800
Grant Admin, Legal, & Administrative				0%	$ -
TOTAL					$ 321,600

[1] *Estimated unit costs are based upon estimates from suppliers and bid tabs for similar projects throughout Montana.*

[2] *The ENR average Construction Cost Index is +2.32% (as of September 2023), so capital costs are projected to the anticipated construction date using a 3% inflation rate.*

GROWTH AREA STREET IMPROVEMENT COST ESTIMATE

Street Name	Start	End	Current Surfacing Type	Length (FT)	Desired Total Width (FT)	Improvement Description	Total Segment Cost
SOUTHEAST GROWTH AREA							
ROUNDABOUT AT KYD RD, TALC RD, E IVY ST, & 4TH AVE E							$ 4,000,000
W IVY ST	S MAIN ST	5TH AVE W	Gravel	1,840	36	Asphalt Reconstruction, 4" Sidewalk	$ 458,808
5TH AVE W	W IVY ST	FRONTAGE RD	Gravel	346	40	Asphalt Reconstruction, 4" Sidewalk	$ 110,745
E IVY ST	S MAIN ST	4TH AVE E	Gravel	1,481	36	Asphalt Reconstruction, 4" Sidewalk	$ 369,728
TALC RD	KYD RD	HWY 2	Pavement	6,493	32	Grading, Asphalt Widening, Asphalt Overlay Type 1, 4" Sidewalk	$ 1,076,435
KYD RD	TALC RD	COLTER TRAIL	Pavement	3,879	32	Grading, Asphalt Widening, Asphalt Overlay Type 1, 4" Sidewalk, Asphalt Bike Path	$ 949,561
KYD RD	COLTER TRAIL	FAIRVIEW CEMETARY	Pavement	2,574	32	Grading, Asphalt Widening, Asphalt Overlay Type 1, 4" Sidewalk, Asphalt Bike Path	$ 630,048
						SOUTHEAST GROWTH AREA COST	**$ 7,595,325**
NORTHWEST GROWTH AREA							
LARGE ROUNDABOUT AT SOUTH DAKOTA ST, RAILWAY AVE, FRONTAGE ROAD, 2ND AVE W, & ELM ST						Complex Roundabout and Intersection Reconstruction	$ 6,000,000
S KANSAS ST	FRONTAGE RD	W JEFFERSON ST	Gravel	1,498	32	Asphalt Reconstruction, 4" Sidewalk	$ 358,703
N ILLINOIS ST	FRONTAGE RD	W JEFFERSON ST	Gravel	1,589	32	Asphalt Reconstruction, 4" Sidewalk	$ 364,289
S DAKOTA ST	RAILWAY AVE	W JEFFERSON ST	Gravel	1,522	40	Asphalt Reconstruction, 4" Sidewalk	$ 416,491
S CALIFORNIA ST	E FRONT ST	E JEFFERSON ST	Gravel	734	32	Asphalt Reconstruction	$ 135,668
S CALIFORNIA ST	RAILWAY AVE	E FRONT ST	Pavement	542	26	Asphalt Overlay Type 2, Curb & Gutter, 4" Sidewalk	$ 62,685
S MONTANA ST	E FRONT ST	RAILWAY AVE	Pavement	310	32	Asphalt Widening, Asphalt Overlay Type 1, 4" Sidewalk	$ 38,762
S MONTANA ST	E FRONT ST	E JEFFERSON ST	Gravel	729	32	Asphalt Reconstruction	$ 134,888
						NORTHWEST GROWTH AREA COST	**$ 7,511,486**
						TOTAL GROWTH AREA STREET IMPROVEMENT COST	**$ 15,106,811**

PRIORITY STREET IMPROVEMENT COST ESTIMATE

Street Name	Start	End	Current Surfacing Type	PASER Rating	Length (FT)	Average Ex. Total Width (FT)	Existing Asphalt Overlay Width (FT)	Desired Total Width (FT)	Primary Improvement					Secondary Improvement					Tertiary Improvement					Total Segment Cost	Priority
									Description	Quantity	Units	Unit Price	Segment Cost	Description	Quantity	Units	Unit Price	Segment Cost	Description	Quantity	Units	Unit Price	Segment Cost		
RAILWAY AVE	FRONTAGE RD	W ASH ST	GRAVEL	4.2	1,962	30		42						Asphalt Reconstruction	9,157	SY	$ 52.00	$ 476,164						$ 476,164	1
RAILWAY AVE	W ASH ST	S MAIN ST	PAVEMENT	8.3	255	49		48	Digout & Asphalt Patching	147	SY	$ 72.00	$ 10,584						Asphalt Overlay Type 2	1,362	SY	$ 21.00	$ 28,602	$ 39,186	1
W IVY ST	S MAIN ST	5TH AVE W	GRAVEL	3.8	1,840	24		32						Asphalt Reconstruction	6,542	SY	$ 52.00	$ 340,184						$ 340,184	2
E IVY ST	S MAIN ST	4TH AVE E	GRAVEL	4.2	1,481	24		32						Asphalt Reconstruction	5,267	SY	$ 52.00	$ 273,884						$ 273,884	2
W FRONT ST	S KANSAS ST	S IOWA ST	GRAVEL	3.9	378	25		32						Asphalt Reconstruction	1,345	SY	$ 52.00	$ 69,940						$ 69,940	3
FRONT RD	W JEFFERSON ST	S KANSAS ST	GRAVEL	3.9	1,188	25		24						Asphalt Reconstruction	3,168	SY	$ 52.00	$ 164,736						$ 164,736	4
W FRONT ST	S IOWA ST	S MONTANA ST	PAVEMENT	7.5	2,736	37.4	24	38						Asphalt Widening	4,256	SY	$ 52.00	$ 221,312	Asphalt Overlay Type 1	7,296	SY	$ 20.00	$ 145,920	$ 367,232	5
1ST AVE W	W IVY ST	W HICKORY ST	GRAVEL	4.0	349	23.5		38						Asphalt Reconstruction	1,473	SY	$ 52.00	$ 76,596						$ 76,596	6
1ST AVE W	W GROVE ST	W ELM ST	GRAVEL	4.0	716	31		38						Asphalt Reconstruction	3,025	SY	$ 52.00	$ 157,300						$ 157,300	6
1ST AVE W	FRONTAGE RD	W CEDAR ST	GRAVEL	4.0	539	27.3		38						Asphalt Reconstruction	2,277	SY	$ 52.00	$ 118,404						$ 118,404	6
W DATE ST	FRONTAGE RD	RAILWAY AVE	GRAVEL	4.0	577	29		38						Asphalt Reconstruction	2,436	SY	$ 52.00	$ 126,672						$ 126,672	7
W ELM ST	FRONTAGE RD	RAILWAY AVE	GRAVEL	3.8	235	36.7		38						Asphalt Reconstruction	992	SY	$ 52.00	$ 51,584						$ 51,584	8
S KANSAS ST	FRONTAGE RD	W JEFFERSON ST	GRAVEL	4.1	1,498	26.3		32						Asphalt Reconstruction	5,327	SY	$ 52.00	$ 277,004						$ 277,004	9
W FIR ST	S MAIN ST	2ND AVE W	GRAVEL	3.8	754	36.5		38						Asphalt Reconstruction	3,185	SY	$ 52.00	$ 165,620						$ 165,620	10
W GROVE ST	2ND AVE W	FRONTAGE RD	GRAVEL	3.9	677	26		42						Asphalt Reconstruction	3,158	SY	$ 52.00	$ 164,216						$ 164,216	11
W HICKORY ST	3RD AVE W	M.P. END - 0.1	GRAVEL	3.9	650	23		42						Asphalt Reconstruction	3,032	SY	$ 52.00	$ 157,664						$ 157,664	12
2ND AVE W	W IVY ST	W HICKORY ST	GRAVEL	3.9	343	22		38						Asphalt Reconstruction	1,448	SY	$ 52.00	$ 75,296						$ 75,296	13
2ND AVE W	W GROVE ST	FRONTAGE RD	GRAVEL	3.9	605	28		38						Asphalt Reconstruction	2,553	SY	$ 52.00	$ 132,756						$ 132,756	13
2ND AVE W	FRONTAGE RD	RAILWAY AVE	GRAVEL	3.9	297	26.5		38						Asphalt Reconstruction	1,253	SY	$ 52.00	$ 65,156						$ 65,156	13
3RD AVE W	W IVY ST	W GROVE ST	GRAVEL	3.8	721	22		38						Asphalt Reconstruction	3,043	SY	$ 52.00	$ 158,236						$ 158,236	14
4TH AVE W	W IVY ST	FRONTAGE RD	GRAVEL	3.8	664	20		38						Asphalt Reconstruction	2,805	SY	$ 52.00	$ 145,860						$ 145,860	15
5TH AVE W	W IVY ST	FRONTAGE RD	GRAVEL	4.0	346	24		38						Asphalt Reconstruction	1,462	SY	$ 52.00	$ 76,024						$ 76,024	16
																							TOTAL COST	$ 3,679,714	

NORTHWEST AREA STREET IMPROVEMENT COST ESTIMATE

Street Name	Start	End	Current Surfacing Type	PASER Rating	Length (FT)	Average Ex. Total Width (FT)	Existing Asphalt Overlay Width (FT)	Desired Total Width (FT)	Primary Improvement					Secondary Improvement					Tertiary Improvement					Total Segment Cost	Priority
									Description	Quantity	Units	Unit Price	Segment Cost	Description	Quantity	Units	Unit Price	Segment Cost	Description	Quantity	Units	Unit Price	Segment Cost		
W MILWAUKEE ST	S KANSAS ST	S CALIFORNIA ST	GRAVEL	4.2	2,305	25		42						Asphalt Reconstruction	10,758	SY	$ 52.00	$ 559,416						$ 559,416	18
W ADAMS ST	W FRONT ST	N MONTANA ST	GRAVEL	4.0	3,645	25		42						Asphalt Reconstruction	17,008	SY	$ 52.00	$ 884,416						$ 884,416	19
W JEFFERSON ST	N MONTANA ST	FRONT RD	GRAVEL	4.1	3,976	25		32						Asphalt Reconstruction	14,136	SY	$ 52.00	$ 735,072						$ 735,072	20
LINDA LN	S KANSAS ST	S OREGON ST	GRAVEL	4.1	868	26		32						Asphalt Reconstruction	3,086	SY	$ 52.00	$ 160,472						$ 160,472	23
S COLORADO ST	W MILWAUKEE ST	W JEFFERSON ST	GRAVEL	3.9	1,111	25		32						Asphalt Reconstruction	3,949	SY	$ 52.00	$ 205,348						$ 205,348	25
S GEORGIA ST	W MILWAUKEE ST	W JEFFERSON ST	GRAVEL	4.0	1,139	25		32						Asphalt Reconstruction	4,050	SY	$ 52.00	$ 210,600						$ 210,600	26
S IOWA ST	W MILWAUKEE ST	W JEFFERSON ST	GRAVEL	3.9	1,141	25		32						Asphalt Reconstruction	4,057	SY	$ 52.00	$ 210,964						$ 210,964	27
N ARIZONA ST	W ADAMS ST	E JEFFERSON ST	GRAVEL	4.2	368	52		32						Asphalt Reconstruction	1,309	SY	$ 52.00	$ 68,068						$ 68,068	28
COTTONWOOD RD	M.P. 0.03	E FRONT ST	GRAVEL	N/A	130	28		36						Asphalt Reconstruction	522	SY	$ 52.00	$ 27,144						$ 27,144	29
E FRONT ST	S MONTANA ST	COTTONWOOD RD	GRAVEL	3.8	615	25		24						Asphalt Reconstruction	1,639	SY	$ 52.00	$ 85,228						$ 85,228	30
E FRONT ST	COTTONWOOD RD	2ND AVE E	GRAVEL	3.9	683	25		24						Asphalt Reconstruction	1,822	SY	$ 52.00	$ 94,744						$ 94,744	31
JEFFERSON ST N	N MONTANA ST	M.P. END - 0.1	GRAVEL	4.0	460	21		32						Asphalt Reconstruction	1,635	SY	$ 52.00	$ 85,020						$ 85,020	32
S OREGON ST	FRONTAGE RD	M.P. END - 0.1	PAVEMENT	8.6	575	24.3		24											Asphalt Overlay Type 1	1,532	SY	$ 20.00	$ 30,640	$ 30,640	61
																						TOTAL COST		**$ 3,357,132**	

Appendix E

PASER Evaluation Data Sheets and Figures

OVERALL STREET IMPROVEMENT COST ESTIMATE

Street Name	Start	End	Current Surfacing Type	PASER Rating	Length (FT)	Average Ex. Total Width (FT)	Existing Asphalt Overlay Width (FT)	Desired Total Width (FT)	Primary Improvement					Secondary Improvement					Tertiary Improvement					Total Segment Cost	Priority
									Description	Quantity	Units	Unit Price	Segment Cost	Description	Quantity	Units	Unit Price	Segment Cost	Description	Quantity	Units	Unit Price	Segment Cost		
RAILWAY AVE	FRONTAGE RD	W ASH ST	GRAVEL	4.2	1,962	30		42						Asphalt Reconstruction	9,157	SY	$ 52.00	$ 476,164.00						$ 476,164.00	1
RAILWAY AVE	W ASH ST	S MAIN ST	PAVEMENT	8.3	255	49		48	Digout & Asphalt Patching	147	SY	$ 72.00	$ 10,584.00						Asphalt Overlay Type 2	$ 1,362.00	SY	$ 21.00	$ 28,602.00	$ 39,186.00	1
W IVY ST	S MAIN ST	5TH AVE W	GRAVEL	3.8	1,840	24		32						Asphalt Reconstruction	6,542	SY	$ 52.00	$ 340,184.00						$ 340,184.00	2
E IVY ST	S MAIN ST	4TH AVE E	GRAVEL	4.2	1,481	24		32						Asphalt Reconstruction	5,267	SY	$ 52.00	$ 273,884.00						$ 273,884.00	2
W FRONT ST	S KANSAS ST	S IOWA ST	GRAVEL	3.9	378	25		32						Asphalt Reconstruction	1,345	SY	$ 52.00	$ 69,940.00						$ 69,940.00	3
FRONT RD	W JEFFERSON ST	S KANSAS ST	GRAVEL	3.9	1,188	25		24						Asphalt Reconstruction	3,168	SY	$ 52.00	$ 164,736.00						$ 164,736.00	4
W FRONT ST	S IOWA ST	S MONTANA ST	PAVEMENT	7.5	2,736	37.4	24	38						Asphalt Widening	4,256	SY	$ 52.00	$ 221,312.00	Asphalt Overlay Type 1	$ 7,296.00	SY	$ 20.00	$ 145,920.00	$ 367,232.00	5
1ST AVE W	W IVY ST	W HICKORY ST	GRAVEL	4.0	349	23.5		38						Asphalt Reconstruction	1,473	SY	$ 52.00	$ 76,596.00						$ 76,596.00	6
1ST AVE W	W GROVE ST	W ELM ST	GRAVEL	4.0	716	31		38						Asphalt Reconstruction	3,025	SY	$ 52.00	$ 157,300.00						$ 157,300.00	6
1ST AVE W	FRONTAGE RD	W CEDAR ST	GRAVEL	4.0	539	27.3		38						Asphalt Reconstruction	2,277	SY	$ 52.00	$ 118,404.00						$ 118,404.00	6
W DATE ST	FRONTAGE RD	RAILWAY AVE	GRAVEL	4.0	577	29		38						Asphalt Reconstruction	2,436	SY	$ 52.00	$ 126,672.00						$ 126,672.00	7
W ELM ST	FRONTAGE RD	RAILWAY AVE	GRAVEL	3.8	235	36.7		38						Asphalt Reconstruction	992	SY	$ 52.00	$ 51,584.00						$ 51,584.00	8
S KANSAS ST	FRONTAGE RD	W JEFFERSON ST	GRAVEL	4.1	1,498	26.3		32						Asphalt Reconstruction	5,327	SY	$ 52.00	$ 277,004.00						$ 277,004.00	9
W FIR ST	S MAIN ST	2ND AVE W	GRAVEL	3.8	754	36.5		38						Asphalt Reconstruction	3,185	SY	$ 52.00	$ 165,620.00						$ 165,620.00	10
W GROVE ST	2ND AVE W	FRONTAGE RD	GRAVEL	3.9	677	26		42						Asphalt Reconstruction	3,158	SY	$ 52.00	$ 164,216.00						$ 164,216.00	11
W HICKORY ST	3RD AVE W	M.P. END - 0.1	GRAVEL	3.9	650	23		42						Asphalt Reconstruction	3,032	SY	$ 52.00	$ 157,664.00						$ 157,664.00	12
2ND AVE W	W IVY ST	W HICKORY ST	GRAVEL	3.9	343	22		38						Asphalt Reconstruction	1,448	SY	$ 52.00	$ 75,296.00						$ 75,296.00	13
2ND AVE W	W GROVE ST	FRONTAGE RD	GRAVEL	3.9	605	28		38						Asphalt Reconstruction	2,553	SY	$ 52.00	$ 132,756.00						$ 132,756.00	13
2ND AVE W	FRONTAGE RD	RAILWAY AVE	GRAVEL	3.9	297	26.5		38						Asphalt Reconstruction	1,253	SY	$ 52.00	$ 65,156.00						$ 65,156.00	13
3RD AVE W	W IVY ST	W GROVE ST	GRAVEL	3.8	721	22		38						Asphalt Reconstruction	3,043	SY	$ 52.00	$ 158,236.00						$ 158,236.00	14
4TH AVE W	W IVY ST	FRONTAGE RD	GRAVEL	3.8	664	20		38						Asphalt Reconstruction	2,805	SY	$ 52.00	$ 145,860.00						$ 145,860.00	15
5TH AVE W	W IVY ST	FRONTAGE RD	GRAVEL	4.0	346	24		38						Asphalt Reconstruction	1,462	SY	$ 52.00	$ 76,024.00						$ 76,024.00	16
S CALIFORNIA ST	E FRONT ST	E JEFFERSON ST	GRAVEL	3.9	734	28		32						Asphalt Reconstruction	2,609	SY	$ 52.00	$ 135,668.00						$ 135,668.00	17
W MILWAUKEE ST	S KANSAS ST	S CALIFORNIA ST	GRAVEL	4.2	2,305	25		42						Asphalt Reconstruction	10,758	SY	$ 52.00	$ 559,416.00						$ 559,416.00	18
W ADAMS ST	W FRONT ST	N MONTANA ST	GRAVEL	4.0	3,645	25		42						Asphalt Reconstruction	17,008	SY	$ 52.00	$ 884,416.00						$ 884,416.00	19
W JEFFERSON ST	N MONTANA ST	FRONT RD	GRAVEL	4.1	3,976	25		32						Asphalt Reconstruction	14,136	SY	$ 52.00	$ 735,072.00						$ 735,072.00	20
S DAKOTA ST	RAILWAY AVE	W JEFFERSON ST	GRAVEL	3.9	1,522	25		32						Asphalt Reconstruction	5,412	SY	$ 52.00	$ 281,424.00						$ 281,424.00	21
N ILLINOIS ST	FRONTAGE RD	W JEFFERSON ST	GRAVEL	3.9	1,589	26.5		32						Asphalt Reconstruction	5,650	SY	$ 52.00	$ 293,800.00						$ 293,800.00	22
LINDA LN	S KANSAS ST	S OREGON ST	GRAVEL	4.1	868	26		32						Asphalt Reconstruction	3,086	SY	$ 52.00	$ 160,472.00						$ 160,472.00	23
S MONTANA ST	E FRONT ST	E JEFFERSON ST	GRAVEL	3.9	729	25		32						Asphalt Reconstruction	2,594	SY	$ 52.00	$ 134,888.00						$ 134,888.00	24
S COLORADO ST	W MILWAUKEE ST	W JEFFERSON ST	GRAVEL	3.9	1,111	25		32						Asphalt Reconstruction	3,949	SY	$ 52.00	$ 205,348.00						$ 205,348.00	25
S GEORGIA ST	W MILWAUKEE ST	W JEFFERSON ST	GRAVEL	4.0	1,139	25		32						Asphalt Reconstruction	4,050	SY	$ 52.00	$ 210,600.00						$ 210,600.00	26
S IOWA ST	W MILWAUKEE ST	W JEFFERSON ST	GRAVEL	3.9	1,141	25		32						Asphalt Reconstruction	4,057	SY	$ 52.00	$ 210,964.00						$ 210,964.00	27
N ARIZONA ST	W ADAMS ST	E JEFFERSON ST	GRAVEL	4.2	368	52		32						Asphalt Reconstruction	1,309	SY	$ 52.00	$ 68,068.00						$ 68,068.00	28
COTTONWOOD RD	M.P. 0.03	E FRONT ST	GRAVEL	N/A	130	28		36						Asphalt Reconstruction	522	SY	$ 52.00	$ 27,144.00						$ 27,144.00	29
E FRONT ST	S MONTANA ST	COTTONWOOD RD	GRAVEL	3.8	615	25		24						Asphalt Reconstruction	1,639	SY	$ 52.00	$ 85,228.00						$ 85,228.00	30
E FRONT ST	COTTONWOOD RD	2ND AVE E	GRAVEL	3.9	683	25		24						Asphalt Reconstruction	1,822	SY	$ 52.00	$ 94,744.00						$ 94,744.00	31
JEFFERSON ST N	N MONTANA ST	M.P. END - 0.1	GRAVEL	4.0	460	21		32						Asphalt Reconstruction	1,635	SY	$ 52.00	$ 85,020.00						$ 85,020.00	32
E NEAL ST	N MAIN ST	7TH AVE E	PAVEMENT	8.5	2,397	40.5	30	42						Asphalt Widening	3,196	SY	$ 52.00	$ 166,192.00	Asphalt Overlay Type 1	$ 7,991.00	SY	$ 20.00	$ 159,820.00	$ 326,012.00	33
S MAIN ST	E HICKORY ST	E DATE ST	PAVEMENT	7.9	1,474	68.8	24	72						Asphalt Widening	7,861	SY	$ 52.00	$ 408,772.00	Asphalt Overlay Type 1	$ 3,931.00	SY	$ 20.00	$ 78,620.00	$ 487,392.00	34
S MAIN ST	E IVY ST	E HICKORY ST	PAVEMENT	7.9	354	24	24	72						Asphalt Widening	1,889	SY	$ 52.00	$ 98,228.00	Asphalt Overlay Type 1	$ 944.00	SY	$ 20.00	$ 18,880.00	$ 117,108.00	35
E ASH ST	RAILWAY AVE	1ST AVE E	PAVEMENT	8.1	564	50	50	50	Digout & Asphalt Patching	269	SY	$ 72.00	$ 19,368.00						Asphalt Overlay Type 2	$ 3,132.00	SY	$ 21.00	$ 65,772.00	$ 85,140.00	36
E ASH ST	1ST AVE E	7TH AVE E	PAVEMENT	8.1	2,199	42	30	42						Asphalt Widening	2,932	SY	$ 52.00	$ 152,464.00	Asphalt Overlay Type 1	$ 7,331.00	SY	$ 20.00	$ 146,620.00	$ 299,084.00	36
E BIRCH ST	RAILWAY AVE	1ST AVE E	PAVEMENT	7.3	733	52		52											Asphalt Overlay Type 2	$ 4,234.00	SY	$ 21.00	$ 88,914.00	$ 88,914.00	37
E BIRCH ST	1ST AVE E	7TH AVE E	PAVEMENT	7.3	2,202	42	26	42						Asphalt Widening	3,915	SY	$ 52.00	$ 203,580.00	Asphalt Overlay Type 1	$ 6,361.00	SY	$ 20.00	$ 127,220.00	$ 330,800.00	37
E CEDAR ST	S MAIN ST	1ST AVE E	PAVEMENT	7.8	386	50		50											Asphalt Overlay Type 2	$ 2,144.00	SY	$ 21.00	$ 45,024.00	$ 45,024.00	38
E CEDAR ST	1ST AVE E	7TH AVE E	PAVEMENT	7.8	2,199	42	30	42						Asphalt Widening	2,933	SY	$ 52.00	$ 152,516.00	Asphalt Overlay Type 1	$ 7,332.00	SY	$ 20.00	$ 146,640.00	$ 299,156.00	38
W CEDAR ST	1ST AVE W	S MAIN ST	PAVEMENT	8.4	385	52		52											Asphalt Overlay Type 2	$ 2,224.00	SY	$ 21.00	$ 46,704.00	$ 46,704.00	39
E DATE ST	S MAIN ST	1ST AVE E	PAVEMENT	8.3	388	50		50	Digout & Asphalt Patching	43	SY	$ 72.00	$ 3,096.00						Asphalt Overlay Type 2	$ 2,155.00	SY	$ 21.00	$ 45,255.00	$ 48,351.00	40
E DATE ST	1ST AVE E	7TH AVE E	PAVEMENT	8.3	2,196	42	30	42						Asphalt Widening	2,928	SY	$ 52.00	$ 152,256.00	Asphalt Overlay Type 1	$ 7,321.00	SY	$ 20.00	$ 146,420.00	$ 298,676.00	40
E ELM ST	S MAIN ST	1ST AVE E	PAVEMENT	8.1	387	50		50	Asphalt Replacement	37	SY	$ 45.00	$ 1,665.00						Asphalt Overlay Type 2	$ 2,148.00	SY	$ 21.00	$ 45,108.00	$ 46,773.00	41
E ELM ST	1ST AVE E	7TH AVE E	PAVEMENT	8.1	2,198	42	30	42						Asphalt Widening	2,930	SY	$ 52.00	$ 152,360.00	Asphalt Overlay Type 1	$ 7,325.00	SY	$ 20.00	$ 146,500.00	$ 298,860.00	41
W ELM ST	S MAIN ST	FRONTAGE RD	PAVEMENT	8.4	614	41	41	42						Asphalt Widening	68	SY	$ 52.00	$ 3,536.00	Asphalt Overlay Type 1	$ 2,799.00	SY	$ 20.00	$ 55,980.00	$ 59,516.00	42
E FIR ST	S MAIN ST	7TH AVE E	PAVEMENT	8.1	2,588	38	30	38						Asphalt Widening	2,300	SY	$ 52.00	$ 119,600.00	Asphalt Overlay Type 1	$ 8,626.00	SY	$ 20.00	$ 172,520.00	$ 292,120.00	43
E GROVE ST	S MAIN ST	TALC RD	PAVEMENT	8.1	2,504	34.7	30	42						Asphalt Widening	3,338	SY	$ 52.00	$ 173,576.00	Asphalt Overlay Type 1	$ 8,346.00	SY	$ 20.00	$ 166,920.00	$ 340,496.00	44
W GROVE ST	S MAIN ST	2ND AVE W	PAVEMENT	8.2	751	39	30	42						Asphalt Widening	1,001	SY	$ 52.00	$ 52,052.00	Asphalt Overlay Type 1	$ 2,503.00	SY	$ 20.00	$ 50,060.00	$ 102,112.00	45
E HICKORY ST	S MAIN ST	5TH AVE E	PAVEMENT	8.0	1,849	38	30	38						Asphalt Widening	1,644	SY	$ 52.00	$ 85,488.00	Asphalt Overlay Type 1	$ 6,164.00	SY	$ 20.00	$ 123,280.00	$ 208,768.00	46
W HICKORY ST	S MAIN ST	3RD AVE W	PAVEMENT	8.3	1,110	39.5	30	42						Asphalt Widening	1,480	SY	$ 52.00	$ 76,960.00	Asphalt Overlay Type 1	$ 3,700.00	SY	$ 20.00	$ 74,000.00	$ 150,960.00	47
E OAK ST	N MAIN ST	2ND AVE E	PAVEMENT	4.0*	238	36		36						Asphalt Reconstruction	952	SY	$ 52.00	$ 49,504.00						$ 49,504.00	48
E OAK ST	5TH AVE E	7TH AVE E	PAVEMENT	8.5*	728	32.8	30	38						Asphalt Widening	648	SY	$ 52.00	$ 33,696.00	Asphalt Overlay Type 1	$ 2,428.00	SY	$ 20.00	$ 48,560.00	$ 82,256.00	49
1ST AVE W	W HICKORY ST	W GROVE ST	PAVEMENT	8.1	377	38	28	38						Asphalt Widening	418	SY	$ 52.00	$ 21,736.00	Asphalt Overlay Type 1	$ 1,172.00	SY	$ 20.00	$ 23,440.00	$ 45,176.00	50
1ST AVE W	W ELM ST	FRONTAGE RD	PAVEMENT	8.1	202	29	29	38						Asphalt Widening	202	SY	$ 52.00	$ 10,504.00	Asphalt Overlay Type 1	$ 650.00	SY	$ 20.00	$ 13,000.00	$ 23,504.00	50
1ST AVE W	W CEDAR ST	RAILWAY AVE	PAVEMENT	8.1	151	32		32											Asphalt Overlay Type 2	$ 537.00	SY	$ 21.00	$ 11,277.00	$ 11,277.00	50
1ST AVE E	E IVY ST	RAILWAY AVE	PAVEMENT	N/A	3,501	36.3	30	38	Digout & Asphalt Patching	67	SY	$ 72.00	$ 4,824.00	Asphalt Widening	3,112	SY	$ 52.00	$ 161,824.00	Asphalt Overlay Type 1	$ 11,670.00	SY	$ 20.00	$ 233,400.00	$ 400,048.00	51
2ND AVE W	W HICKORY ST	W GROVE ST	PAVEMENT	8.0	376	30	30	38						Asphalt Widening	334	SY	$ 52.00	$ 17,368.00	Asphalt Overlay Type 1	$ 1,253.00	SY	$ 20.00	$ 25,060.00	$ 42,428.00	52
2ND AVE E	E IVY ST	RAILWAY AVE	PAVEMENT	7.3	3,893	30	30	38	Digout & Asphalt Patching	44	SY	$ 72.00	$ 3,168.00	Asphalt Widening	3,460	SY	$ 52.00	$ 179,920.00	Asphalt Overlay Type 1	$ 12,977.00	SY	$ 20.00	$ 259,540.00	$ 442,628.00	53
3RD AVE E	E IVY ST	E NEAL ST	PAVEMENT	7.9	3,286	30	30	38						Asphalt Widening	2,921	SY	$ 52.00	$ 151,892.00	Asphalt Overlay Type 1	$ 10,952.00	SY	$ 20.00	$ 219,040.00	$ 370,932.00	54
4TH AVE E	E IVY ST	E OAK ST	PAVEMENT	7.4	3,649	30	30	38						Asphalt Widening	3,244	SY	$ 52.00	$ 168,688.00	Asphalt Overlay Type 1	$ 12,163.00	SY	$ 20.00	$ 243,260.00	$ 411,948.00	55
5TH AVE E	TALC RD	E OAK ST	PAVEMENT	7.7	3,475	30	30	38						Asphalt Widening	3,089	SY	$ 52.00	$ 160,628.00	Asphalt Overlay Type 1	$ 11,584.00	SY	$ 20.00	$ 231,680.00	$ 392,308.00	56
6TH AVE E	E GROVE ST	E OAK ST	PAVEMENT	8.5	2,918	30	30	38						Asphalt Widening	2,594	SY	$ 52.00	$ 134,888.00	Asphalt Overlay Type 1	$ 9,727.00	SY	$ 20.00	$ 194,540.00	$ 329,428.00	57
7TH AVE E	TALC RD	E OAK ST	PAVEMENT	8.1	2,853	30	30	38						Asphalt Widening	2,536	SY	$ 52.00	$ 131,872.00	Asphalt Overlay Type 1	$ 9,511.00	SY	$ 20.00	$ 190,220.00	$ 322,092.00	58
S CALIFORNIA ST	RAILWAY AVE	E FRONT ST	PAVEMENT	8.1	542	26	26	32						Asphalt Widening	362	SY	$ 52.00	$ 18,824.00	Asphalt Overlay Type 1	$ 1,567.00	SY	$ 20.00	$ 31,340.00	$ 50,164.00	59
S MONTANA ST	E FRONT ST	RAILWAY AVE	PAVEMENT	8.1	310	36.3	27	32						Asphalt Widening	172	SY	$ 52.00	$ 8,944.00	Asphalt Overlay Type 1	$ 1,102.00	SY	$ 20.00	$ 22,040.00	$ 30,984.00	60

OVERALL STREET IMPROVEMENT COST ESTIMATE

Street Name	Start	End	Current Surfacing Type	PASER Rating	Length (FT)	Average Ex. Total Width (FT)	Existing Asphalt Overlay Width (FT)	Desired Total Width (FT)	Primary Improvement					Secondary Improvement					Tertiary Improvement					Total Segment Cost	Priority
									Description	Quantity	Units	Unit Price	Segment Cost	Description	Quantity	Units	Unit Price	Segment Cost	Description	Quantity	Units	Unit Price	Segment Cost		
S OREGON ST	FRONTAGE RD	M.P. END - 0.1	PAVEMENT	8.6	575	24.3		24											Asphalt Overlay Type 1	$ 1,532.00	SY	$ 20.00	$ 30,640.00	$ 30,640.00	61
LINDA LN	S OREGON ST	END	PAVEMENT	8.5	901	24	24	32						Asphalt Widening	801	SY	$ 52.00	$ 41,652.00	Asphalt Overlay Type 1	$ 2,403.00	SY	$ 20.00	$ 48,060.00	$ 89,712.00	62
COLTER TR	KYD RD	M.P. END - 0.6	PAVEMENT	7.8	3,267	25		24											Asphalt Overlay Type 1	$ 8,712.00	SY	$ 20.00	$ 174,240.00	$ 174,240.00	63
TALC RD	KYD RD	HWY 2	PAVEMENT	7.6	6,493	24		24											Asphalt Overlay Type 1	$ 17,314.00	SY	$ 20.00	$ 346,280.00	$ 346,280.00	64
COTTONWOOD RD	N MAIN ST	M.P. 0.03	PAVEMENT	8.3	166	36		36											Asphalt Overlay Type 1	$ 662.00	SY	$ 20.00	$ 13,240.00	$ 13,240.00	65
E OAK ST	4TH AVE E	5TH AVE E	PAVEMENT	9.9*	362	50		50																$ -	
S MAIN ST	E DATE ST	RAILWAY AVE	PAVEMENT	7.9	1,266	73.8			MDT-Maintained Route															$ -	
FRONTAGE RD	S OREGON ST	S MAIN ST	PAVEMENT	8.1	3,309	26			MDT-Maintained Route															$ -	
KYD RD	TALC RD	COLTER TRAIL	PAVEMENT	8.1	3,879	24			County-Maintained Route															$ -	
N MAIN ST	S MAIN ST	N 2ND AVE E	PAVEMENT	8.3	1,092	58			MDT-Maintained Route															$ -	
5TH AVE E	E OAK ST	END	PAVEMENT	N/A	262	20			Private Road?															$ -	
																							TOTAL COST	$ 15,482,741.00	

PASER rating values denoted as N/A indicate segments that were missed during the field evaluation.
PASER rating values denoted with an asterisk indicate estimated PASER values.

PASER Results

City of Three Forks, Gallatin County, Montana

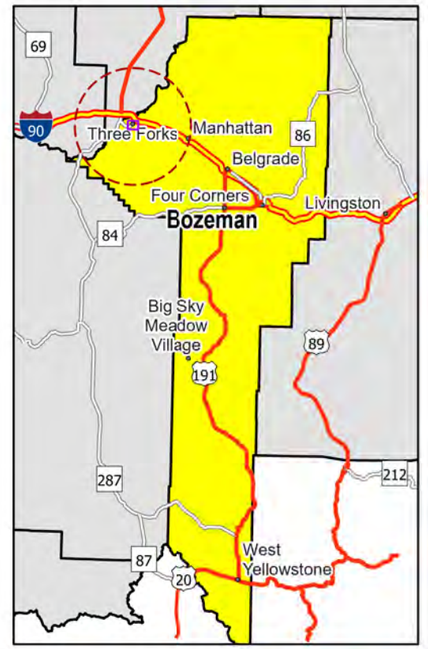
Pavement PASER Rating	Gravel PASER Rating
1 - 5	1 - 3.8
5.1 - 7.5	3.9 - 3.9
7.6 - 8.0	4.0 - 4.0
8.1 - 8.5	4.1 - 4.1
8.6 - 10	4.2 - 5
Not Evaluated	

City Limits
Parcels

Roads
- NHS Interstate
- Primary Road
- Secondary Road
- City-County Road

N

0 500 1,000 2,000
US Feet



GreatWest ENGINEERING

Improvements

City of Three Forks, Gallatin County, Montana

Improvement Type

- Asphalt Reconstruction
- Asphalt Overlay Type 1
- Asphalt Overlay Type 1 with Asphalt Widening
- Asphalt Overlay Type 2
- No improvement

City Limits

Parcels

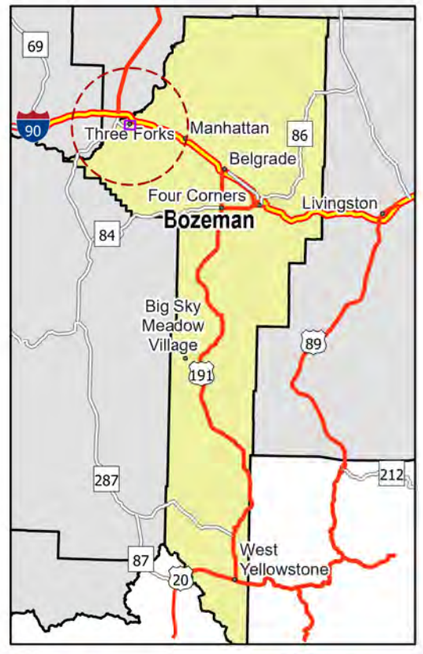
Roads

- NHS Interstate
- Primary Road
- Secondary Road
- City-County Road

N

0 500 1,000 2,000

US Feet



GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **1ST AVE E**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: E IVY ST	Milepost End: 0.6 MILES	Date: 5/4/2023
Stop: RAILWAY AVE	Length: 0.6 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	10.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	10.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	10.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	10.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	10.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	10.0
CRACKS *Transverse*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	10.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	10.0
CRACKS *Alligator*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	10.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	10.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	10.0
PATCHES			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	10.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	10.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	10.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:				
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☐ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 10.0

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Curb and Gutter installed over most of the street. Road segment is typical 30' wide chip sealed overlay. At intersection of 1st and E Grove, there is a 30'x20' patch of alligator cracked pavement - near failure,

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CITY OF THREE FORKS
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **1ST AVE W**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: W IVY ST	Milepost End: 0.4 MILES	Date: 5/12/2023
Stop: RAILWAY AVE	Length: 0.4 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding -	Slight	☐	☐	☐	4.0
		Moderate Ponding -	Moderate	☑	☐	☐	
		Severe Ponding -	Severe	☐	☐	☐	
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep -	*Angularity*	☐	☐	☐	4.0
		2"-4" deep -	☑ Good	☐	☑	☐	
		<2" deep -	☐ Poor	☐	☐	☐	
SURFACE DEFORMATION *Washboarding*		<1" deep -	Slight	☐	☐	☑	4.0
		1"-3" deep -	Moderate	☐	☐	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Potholes*		<2" deep -	Slight	☐	☐	☐	3.0
		2"-4" deep -	Moderate	☐	☑	☐	
		>4" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Ruts*		<1" deep -	Slight	☐	☐	☐	4.0
		1"-3" deep -	Moderate	☑	☐	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps -	Slight	☐	☐	☐	4.0
		Rough Ride -	Moderate	☑	☐	☐	
		Speed Reduction -	Severe	☐	☐	☐	
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust -	Slight	☐	☑	☐	4.0
		Moderate Dust -	Moderate	☐	☐	☐	
		Severe Dust -	Severe	☐	☐	☐	

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section -	Good	☐	☑	☐	4.0
		Flat Section -	Slight	☐	☐	☐	
		Negative Crown -	Severe	☐	☐	☐	
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐	4:1 (or better) -	Recoverable	☐	☐	☐	
	Not Applicable ☑	4:1 to 3:1 -	Traversable	☐	☐	☐	
		Steeper than 3:1 -	Too Steep	☐	☐	☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		25	26		Avg. 25.5
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑	Placard Missing ☐	Remove Sign ☐			5.0
		Bullet Holes ☐	Need Add'l Items ☐	New Signs Req'd ☐			
		Damage ☐	Sign Post Damage ☐	# Signs	0		
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft)		60			Avg. 60
		Width: Obstruction to Fenceline (ft)					
		Width: Obstruction to Obstruction (ft)					

PASER Rating = 4.0

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

This segment is a patchwork of paved and unpaved sections totaling 0.4 miles. Starting from the south end, W Ivy St. to W Hickory is gravel, W Hickory to W Grove is paved, W Grove to W Elm is gravel, W Elm to the Frontage Rd is paved. On the North side of Frontage Rd., the street is gravel to just before the intersection with W Cedar St., where it is paved and hooks into Railway Ave. The gravel segments are similar to surrounding gravel streets, they are generally 25' wide with side parking lanes. No curb& gutter.

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CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **1ST AVE W**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: W IVY ST	Milepost End: 0.4 MILES	Date: 5/5/2023
Stop: RAILWAY AVE	Length: 0.4 MILES	Posted Speed: 25 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	10.0
CRACKS *Transverse*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Alligator*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PATCHES			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	15			Avg.15
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 8.1

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

This segment is a patchwork of paved and unpaved sections with a total length of 0.4 miles. Starting from the south end, W Ivy St. to W Hickory is gravel, W Hickory to W Grove is paved, W Grove to W Elm is gravel, W Elm to the Frontage Rd is paved. On the North side of Frontage Rd., The street is gravel to just before the intersection with W Cedar, where it is paved and hooks into Railway Ave. The paved sections are similar to surrounding paved streets. They are 30' wide overlay with 25' shipsealed driving lanes. No curb and

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CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name:	Milepost Begin:	Inspected By:
2ND AVE E	0.0 MILES	JIM GOLD
Start:	Milepost End:	Date:
E IVY ST	0.7 MILES	5/4/2023
Stop:	Length:	Posted Speed:
RAILWAY AVE	0.7 MILES	15 MPH

Roadway Surface Condition	**Comments**	**Degree**	**Type**	**Area % Affected** 0-15% Value	16-30% Value	>30% Value	**Score**
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Transverse*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Alligator*	2nd and E Date		Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	6.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	6.0
PATCHES			Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	6.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0

Roadway Geometry & Traffic Control	**Comments**	**General Condition**	**Type**	**Area % Affected** 0-15% Value	16-30% Value	>30% Value	**Score**
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	15			Avg.15
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 7.3

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

E. Ivy to E. Hickory is 26' wide with parking area on the west side. From E. Hickory north, the street widens to typical 30' overlay with chip seal in the driving lanes and side parking lanes on both sides. There is deteriorating concrete curb on the West side of the street from E Hickory to E. Fir and from E Elm to E Date. There is 20'x20' failed pavement area at the intersection of 2nd Ave. E and E Date. Curb of both side of the street from E Cedar to E. Birch, on just the West side of the street from W Birch to E Ash and back to both

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CITY OF THREE FORKS
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **2ND AVE W**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: W IVY ST	Milepost End: 0.2 MILES	Date: 5/9/2023
Stop: FRONTAGE RD	Length: 0.2 MILES	Posted Speed: 25 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding -	Slight	☐	☐	☐	3.0
		Moderate Ponding -	Moderate	☐	☑	☐	
		Severe Ponding -	Severe	☐	☐	☐	
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep -	*Angularity*	☐	☐	☐	4.0
		2"-4" deep -	☑ Good	☐	☑	☐	
		<2" deep -	☐ Poor	☐	☐	☐	
SURFACE DEFORMATION *Washboarding*		<1" deep -	Slight	☐	☐	☑	4.0
		1"-3" deep -	Moderate	☐	☐	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Potholes*		<2" deep -	Slight	☐	☑	☐	4.0
		2"-4" deep -	Moderate	☐	☐	☐	
		>4" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Ruts*		<1" deep -	Slight	☐	☐	☐	3.0
		1"-3" deep -	Moderate	☐	☑	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps -	Slight	☐	☐	☑	4.0
		Rough Ride -	Moderate	☐	☐	☐	
		Speed Reduction -	Severe	☐	☐	☐	
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust -	Slight	☐	☐	☑	4.0
		Moderate Dust -	Moderate	☐	☐	☐	
		Severe Dust -	Severe	☐	☐	☐	

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section -	Good	☐	☑	☐	4.0
		Flat Section -	Slight	☐	☐	☐	
		Negative Crown -	Severe	☐	☐	☐	
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐	4:1 (or better) -	Recoverable	☐	☐	☐	
	Not Applicable ☑	4:1 to 3:1 -	Traversable	☐	☐	☐	
		Steeper than 3:1 -	Too Steep	☐	☐	☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		25	25		Avg. 25
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑	Placard Missing ☐	Remove Sign ☐			5.0
		Bullet Holes ☐	Need Add'l Items ☐	New Signs Req'd ☐			
		Damage ☐	Sign Post Damage ☐	# Signs	0		
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft)		60			Avg. 60
		Width: Obstruction to Fenceline (ft)					
		Width: Obstruction to Obstruction (ft)					

PASER Rating = 3.9

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Street is gravel from W Ivy to W Hickory, then paved from W Hickory to W Grove, then back to gravel from W Grove to Frontage road. Gravel streets are generally 25' wide with some side lane parking areas. Signs of ponding in the parking lanes. Gravel sections may have been recently graded.

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CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **2ND AVE W**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: W HICKORY ST	Milepost End: 0.1 MILES	Date: 5/5/2023
Stop: W GROVE ST	Length: 0.1 MILES	Posted Speed: 25 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Transverse*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Alligator*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PATCHES			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	15			Avg.15
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 8.0

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Street is gravel from W Ivy to W Hickory, then paved from W Hickory to W Grove, then back to gravel from W Grove to Frontage road. The paved segment is typically 30' wide chipsealed/overlay with side lane parking. There is curb& gutter on the west side of the street. Loose gravel in the street.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **3RD AVE E**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: E IVY ST	Milepost End: 0.6 MILES	Date: 5/4/2023
Stop: E NEAL ST	Length: 0.6 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)	Ponding at corners and alleys	Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Transverse*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Alligator*	Cracks have been sealed		Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PATCHES			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	15			Avg.15
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 7.9

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Street segment is similar to others; 30' wide overlay with 25' seal coat on driving lanes and, occasionally, 6' wide side parking lanes. Generally, no curb and gutter, but there is deteriorating concrete block curb on the East side of the street between Grove and Fir, on the West side of the street between Fir and Elm, on both sides from Elm to Birch, and most of the West side of the street from Birch to Neal. The east driving lane has a darker chip seal coat on it, possibly due to increased oil content during the chip seal.

GreatWest ENGINEERING

CITY OF THREE FORKS
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **3RD AVE W**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: W IVY ST	Milepost End: 0.1 MILES	Date: 5/9/2023
Stop: W GROVE ST	Length: 0.1 MILES	Posted Speed: 25 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	3.0
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep - 2"-4" deep - <2" deep -	*Angularity* ☑ Good ☐ Poor	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	4.0
SURFACE DEFORMATION *Washboarding*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
SURFACE DEFORMATION *Potholes*		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
SURFACE DEFORMATION *Ruts*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	3.0
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	3.0
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust - Moderate Dust - Severe Dust -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐ Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		25	25		Avg. 25
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			5.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)		60			Avg. 60

PASER Rating = 3.8

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Street is short - 2 blocks long gravel segment that connects into W Grove. Street is 25' wide with some side lane parking. Blade

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **4TH AVE E**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: E IVY ST	Milepost End: 0.7 MILES	Date: 5/4/2023
Stop: E OAK ST	Length: 0.7 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Transverse*	Cracks are sealed		Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Alligator*	A cracking at some corners		Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
POTHOLES	Primarily near Elementary school.	<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
PATCHES			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	15			Avg.15
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 7.4

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Street segment starts on Talc Rd. blends into E Ivy, which is a gravel road. Pavement starts north of Ivy, street is 30' wide overlay with chip seal on that. East lane of chip seal is darker than the West, indication more oil? There is older curb and gutter on both sides of the street between E. Fir and E. Date, except the southeast 1/2 of Fir. Both sides of the street have deteriorating concrete curb from E. Date to Ash. Street ends at school parking lot.

GreatWest ENGINEERING

CITY OF THREE FORKS
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **4TH AVE W**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: W IVY ST	Milepost End: 0.1 MILES	Date: 5/9/2023
Stop: FRONTAGE RD	Length: 0.1 MILES	Posted Speed: 25 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding -	Slight	☐	☐	☐	3.0
		Moderate Ponding -	Moderate	☐	☑	☐	
		Severe Ponding -	Severe	☐	☐	☐	
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep -	*Angularity*	☐	☐	☐	4.0
		2"-4" deep -	☑ Good	☐	☑	☐	
		<2" deep -	☐ Poor	☐	☐	☐	
SURFACE DEFORMATION *Washboarding*		<1" deep -	Slight	☐	☐	☑	4.0
		1"-3" deep -	Moderate	☐	☐	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Potholes*		<2" deep -	Slight	☐	☑	☐	4.0
		2"-4" deep -	Moderate	☐	☐	☐	
		>4" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Ruts*		<1" deep -	Slight	☐	☐	☐	3.0
		1"-3" deep -	Moderate	☐	☑	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps -	Slight	☐	☐	☐	3.0
		Rough Ride -	Moderate	☐	☑	☐	
		Speed Reduction -	Severe	☐	☐	☐	
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust -	Slight	☐	☐	☑	4.0
		Moderate Dust -	Moderate	☐	☐	☐	
		Severe Dust -	Severe	☐	☐	☐	

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section -	Good	☐	☑	☐	4.0
		Flat Section -	Slight	☐	☐	☐	
		Negative Crown -	Severe	☐	☐	☐	
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐	4:1 (or better) -	Recoverable	☐	☐	☐	
	Not Applicable ☑	4:1 to 3:1 -	Traversable	☐	☐	☐	
		Steeper than 3:1 -	Too Steep	☐	☐	☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		25	25		Avg. 25
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑	Placard Missing ☐	Remove Sign ☐			5.0
		Bullet Holes ☐	Need Add'l Items ☐	New Signs Req'd ☐			
		Damage ☐	Sign Post Damage ☐	# Signs	0		
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft)		60			Avg. 60
		Width: Obstruction to Fenceline (ft)					
		Width: Obstruction to Obstruction (ft)					

PASER Rating = 3.8

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Street is short - 2 blocks long gravel segment that connects into Frontage Rd. Street is 25' wide, with some ponding.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **5TH AVE E**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: TALC RD	Milepost End: 0.7 MILES	Date: 5/4/2023
Stop: E OAK ST	Length: 0.7 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	6.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Distortion*	Tree roots		Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Transverse*	Cracks are mostly sealed.		Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Alligator*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PATCHES			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	15			Avg.15
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 7.7

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

30' overlayment with 25' wide chip seal over that. One resident on Elm has new C&G and the west side from Date to Ash has older, broken up concrete curb. Pavement extends into school parking lot.

GreatWest ENGINEERING

CITY OF THREE FORKS
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **5TH AVE W**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: W IVY ST	Milepost End: 0.1 MILES	Date: 5/9/2023
Stop: FRONTAGE RD	Length: 0.1 MILES	Posted Speed: 25 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding -	Slight	☐	☐	☑	4.0
		Moderate Ponding -	Moderate	☐	☐	☐	
		Severe Ponding -	Severe	☐	☐	☐	
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep -	*Angularity*	☐	☐	☐	4.0
		2"-4" deep -	☑ Good	☐	☑	☐	
		<2" deep -	☐ Poor	☐	☐	☐	
SURFACE DEFORMATION *Washboarding*		<1" deep -	Slight	☐	☐	☑	4.0
		1"-3" deep -	Moderate	☐	☐	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Potholes*		<2" deep -	Slight	☐	☑	☐	4.0
		2"-4" deep -	Moderate	☐	☐	☐	
		>4" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Ruts*		<1" deep -	Slight	☐	☑	☐	4.0
		1"-3" deep -	Moderate	☐	☐	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps -	Slight	☐	☐	☐	3.0
		Rough Ride -	Moderate	☐	☑	☐	
		Speed Reduction -	Severe	☐	☐	☐	
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust -	Slight	☐	☐	☑	4.0
		Moderate Dust -	Moderate	☐	☐	☐	
		Severe Dust -	Severe	☐	☐	☐	

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section -	Good	☐	☑	☐	4.0
		Flat Section -	Slight	☐	☐	☐	
		Negative Crown -	Severe	☐	☐	☐	
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐	4:1 (or better) -	Recoverable	☐	☐	☐	
	Not Applicable ☑	4:1 to 3:1 -	Traversable	☐	☐	☐	
		Steeper than 3:1 -	Too Steep	☐	☐	☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		25	25		Avg. 25
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑	Placard Missing ☐	Remove Sign ☐			5.0
		Bullet Holes ☐	Need Add'l Items ☐	New Signs Req'd ☐			
		Damage ☐	Sign Post Damage ☐	# Signs	0		
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft)		60			Avg. 60
		Width: Obstruction to Fenceline (ft)					
		Width: Obstruction to Obstruction (ft)					

PASER Rating = 4.0

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Street is short - 1 block long gravel segment. Street is 25' wide.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **6TH AVE E**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: E GROVE ST	Milepost End: 0.6 MILES	Date: 5/4/2023
Stop: E OAK ST	Length: 0.6 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)	Signs of ponding at corners	Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Transverse*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Longitudinal*	Crack have been sealed		Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Alligator*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
PATCHES			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	15			Avg.15
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 8.5

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

30' wide pavement overlay with 25' chip seal on top of that. No C&G except for three lots, 2 on Elm and one on Oak, where the owner likely paid for it.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **7TH AVE E**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: TALC RD	Milepost End: 0.5 MILES	Date: 5/4/2023
Stop: E OAK ST	Length: 0.5 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)	Slight ponding at corners	Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Transverse*	Most cracks sealed		Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Alligator*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PATCHES			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	15			Avg.15
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 8.1

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Street segment is 30' wide overlay and 25' wide driving lanes chip seal over slightly wider original pavement. Older pavement on edges is deteriorating. No C&G.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **COLTER TRAIL**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: KYD RD	Milepost End: 0.6 MILES	Date: 5/8/2023
Stop: M.P. END - 0.6	Length: 0.6 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☑ ☐ ☐	5.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Transverse*	Cracks are sealed		Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Alligator*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
PATCHES			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	12.5			Avg.12.5
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 7.8

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Small subdivision - nice access road. No c&g.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **COTTONWOOD RD**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: RAILWAY AVE	Milepost End: 0.1 MILES	Date: 5/4/2023
Stop: E FRONT ST	Length: 0.1 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Transverse*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Alligator*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PATCHES			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	18			Avg.18
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 8.3

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

The east half of this segment is a short (1 block) section of paved road with adjacent parking lot to the north. The west half is a well graded gravel road with a 9' wide paved walking/biking path on the south side. It appears the majority of use is by heavy vehicles from the nearby concrete plant. North edge of gravel section has some ponding at this time.

GreatWest ENGINEERING

CITY OF HAVRE
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **E FRONT ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: N MONTANA ST	Milepost End: 0.1 MILES	Date: 5/8/2023
Stop: COTTONWOOD RD	Length: 0.1 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding -	Slight	☐	☐	☐	3.0
		Moderate Ponding -	Moderate	☐	☑	☐	
		Severe Ponding -	Severe	☐	☐	☐	
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep -	*Angularity*	☐	☐	☑	5.0
		2"-4" deep -	☑ Good	☐	☐	☐	
		<2" deep -	☐ Poor	☐	☐	☐	
SURFACE DEFORMATION *Washboarding*		<1" deep -	Slight	☐	☐	☐	3.0
		1"-3" deep -	Moderate	☐	☑	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Potholes*		<2" deep -	Slight	☐	☐	☐	3.0
		2"-4" deep -	Moderate	☐	☑	☐	
		>4" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Ruts*		<1" deep -	Slight	☐	☐	☑	4.0
		1"-3" deep -	Moderate	☐	☐	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps -	Slight	☐	☑	☐	4.0
		Rough Ride -	Moderate	☐	☐	☐	
		Speed Reduction -	Severe	☐	☐	☐	
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust -	Slight	☐	☑	☐	4.0
		Moderate Dust -	Moderate	☐	☐	☐	
		Severe Dust -	Severe	☐	☐	☐	

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section -	Good	☐	☑	☐	4.0
		Flat Section -	Slight	☐	☐	☐	
		Negative Crown -	Severe	☐	☐	☐	
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐	4:1 (or better) -	Recoverable	☐	☐	☐	
	Not Applicable ☑	4:1 to 3:1 -	Traversable	☐	☐	☐	
		Steeper than 3:1 -	Too Steep	☐	☐	☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		25	25		Avg. 25
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑	Placard Missing ☐	Remove Sign ☐			5.0
		Bullet Holes ☐	Need Add'l Items ☐	New Signs Req'd ☐			
		Damage ☐	Sign Post Damage ☐	# Signs	0		
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft)		60			Avg. 60
		Width: Obstruction to Fenceline (ft)					
		Width: Obstruction to Obstruction (ft)					

PASER Rating = 3.9

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

No curb& gutter, 9' walking/biking trail on west side of road. Short section of road, ends at concrete plant.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **E ASH ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: E FRONT ST	Milepost End: 0.6 MILES	Date: 5/4/2023
Stop: 7TH AVE E	Length: 0.6 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☑ ☐	☐ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Transverse*	Cracks are sealed		Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Alligator*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PATCHES			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	10.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	25	22		Avg.23.5
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 8.1

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Segment starts at E Front, where is is a wide, curving intersection. The street from Main St. to 1st St is 50' wide with additional space for diagonal parking on the south side. From 1st Ave. to 7 the street is 42' wide: 30' ' driving lane and 6' parking lanes in each sides. The parking lanes are older asphalt and are typically more worn. Utility patch from 2nd to 4th Ave., or possible excess asphalt on the chip seal.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **E BIRCH ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: RAILWAY AVE	Milepost End: 0.4 MILES	Date: 5/4/2023
Stop: 7TH AVE E	Length: 0.4 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	6.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Transverse*	Cracks are sealed		Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Alligator*	30'x 30' area of alligator cracking on intersection w/ 7th Ave. E there is curb only on the West 1/2 of the street between 1st and 2nd Aves, and the South 1/2 of the street between 4th and 5th.		Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	6.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	6.0
PATCHES			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☑	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	25	21		Avg.23
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 7.3

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Street segment (W Birch) starts at Railroad Ave, Street is 54' wide. Across Main Street, the street is E Birch and is 50' wide between Main St. and 1st Ave. Diagonal parking on the South side of the street. The street narrows to the typical 42' from 1st, to 7th St. Curb only on the West 1/2 of the street between 1st and 2nd Ave, and on the South 1/2 of the street between 4th and 5th Aves.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **E CEDAR ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: N MAIN ST	Milepost End: 0.4 MILES	Date: 5/4/2023
Stop: 7TH AVE E	Length: 0.4 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)	Signs of ponding at alleys	Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Transverse*	Cracks have been sealed		Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Alligator*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
PATCHES			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	25	21		Avg.23
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 7.8

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Similar pattern, Street is 50' wide from Main to 1st Ave., Street just goes to sidewalk, no C&G. Diagonal parking on South side of street. at 1st Ave., street narrowas to typical 42', with a 30' overlay/ chip seal and side lane parking. Full curb betweeen 1st and 2nd Aves, on the North side only betwwn 2nd and 3rd, on the Southeast corner between 3rd and 4th, full curb between 4th and 5th.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **E DATE ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: S MAIN ST	Milepost End: 0.5 MILES	Date: 5/4/2023
Stop: 7TH AVE E	Length: 0.5 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Transverse*	Cracks are sealed		Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Alligator*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
PATCHES			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	25	21		Avg.23
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 8.3

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Street segment is 50' wide between Main St and 1st St. No C&G, just sidewalk. At 1st St, street narrows to 42', typical 30' overlaid and chip sealed driving lane, with 6' side parking lanes. Older curb located on the North- West quarter between 2nd and 3rd, all of the block between 4th and 5th. and the southwest quarter between 6th and 7th St.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **E ELM ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: N MAIN ST	Milepost End: 0.5 MILES	Date: 5/4/2023
Stop: 7TH AVE E	Length: 0.5 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)	Signs of ponding at alleys	Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Transverse*	Cracks are sealed		Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Alligator*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
PATCHES			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	25	21		Avg.23
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 8.1

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Street segment between Main St. and 1st is 50' wide, with sidewalks, no C&G. Street goes to 42' wide - 30' driving, w/ 6' side parking lanes. Curb only on West 1/2 of street between 1st and 2nd, the North 1/2 of street between 2nd and 3rd, the West 1/2 of street between 3rd and 4th, 3/4 of the street between 4th and 5th and the West 1/2 of the street between 5th and 6th.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **E FIR ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: S MAIN ST	Milepost End: 0.5 MILES	Date: 5/4/2023
Stop: 7TH AVE E	Length: 0.5 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)	Signs of ponding at alleys.	Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Transverse*	Cracks are sealed		Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Alligator*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
PATCHES			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	15			Avg.15
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 8.1

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Street segment has curb only between 1st and 2nd, and just curb on the west halfs of the blocks between 3rd and 4th, 4th to 5th. Street looks to have been overlaid and chip sealed, with older pavement side parking lanes.

GreatWest ENGINEERING

CITY OF HAVRE
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **E FRONT ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: S MONTANA ST	Milepost End: 0.2 MILES	Date: 5/8/2023
Stop: COTTONWOOD RD	Length: 0.2 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding -	Slight	☐	☐	☑	4.0
		Moderate Ponding -	Moderate	☐	☐	☐	
		Severe Ponding -	Severe	☐	☐	☐	
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep -	*Angularity*	☐	☐	☐	4.0
		2"-4" deep -	☑ Good	☑	☐	☐	
		<2" deep -	☐ Poor	☐	☐	☐	
SURFACE DEFORMATION *Washboarding*		<1" deep -	Slight	☐	☐	☐	3.0
		1"-3" deep -	Moderate	☐	☑	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Potholes*		<2" deep -	Slight	☐	☐	☐	3.0
		2"-4" deep -	Moderate	☐	☑	☐	
		>4" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Ruts*		<1" deep -	Slight	☐	☐	☐	3.0
		1"-3" deep -	Moderate	☐	☑	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps -	Slight	☐	☑	☐	4.0
		Rough Ride -	Moderate	☐	☐	☐	
		Speed Reduction -	Severe	☐	☐	☐	
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust -	Slight	☐	☑	☐	4.0
		Moderate Dust -	Moderate	☐	☐	☐	
		Severe Dust -	Severe	☐	☐	☐	

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section -	Good	☐	☑	☐	4.0
		Flat Section -	Slight	☐	☐	☐	
		Negative Crown -	Severe	☐	☐	☐	
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐	4:1 (or better) -	Recoverable	☐	☐	☐	
	Not Applicable ☑	4:1 to 3:1 -	Traversable	☐	☐	☐	
		Steeper than 3:1 -	Too Steep	☐	☐	☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		25	25		Avg. 25
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑	Placard Missing ☐	Remove Sign ☐			5.0
		Bullet Holes ☐	Need Add'l Items ☐	New Signs Req'd ☐			
		Damage ☐	Sign Post Damage ☐	# Signs	0		
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft)		60			Avg. 60
		Width: Obstruction to Fenceline (ft)					
		Width: Obstruction to Obstruction (ft)					

PASER Rating = 3.8

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Segment starts at the intersection with S Montana and W Front and continues NE to Cottonwood. Road is 25' wide with a 9' asphalt walking/biking path to the west. No curb & gutter. Signs of ponding.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **E GROVE ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: S MAIN ST	Milepost End: 0.5 MILES	Date: 5/4/2023
Stop: TALC RD	Length: 0.5 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Transverse*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Alligator*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
PATCHES			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	15	21		Avg.18
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 8.1

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Generally no G&G, but there is some between 1st and 2nd, Street is 42' wide due to side lane parking . Some curb appears to have been installed by homeowner. Typical street is 30' wide overlay and chip sealed with 6' wide side parking lanes.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **E HICKORY ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: S MAIN ST	Milepost End: 0.4 MILES	Date: 5/4/2023
Stop: 5TH AVE E	Length: 0.4 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Transverse*	Cracks are sealed		Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Alligator*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PATCHES			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	 29 14.5	 28 14	 29 14.5	 Avg. 28.7 Avg.14.3
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)		15					
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☐ Bullet Holes ☐ Damage ☐	Placard Missing ☑ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			9.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 8.0

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

No C&G except 1/2 block between 1st and 2nd, north side. Street is 30' wide. Street segment has been overlaid and chip sealed. Some utility patches.

GreatWest ENGINEERING

CITY OF HAVRE
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **E IVY ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: MAIN ST	Milepost End: 0.2 MILES	Date: 5/4/2023
Stop: TALC RD	Length: 0.2 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep - 2"-4" deep - <2" deep -	*Angularity* ☑ Good ☐ Poor	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	5.0
SURFACE DEFORMATION *Washboarding*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
SURFACE DEFORMATION *Potholes*		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
SURFACE DEFORMATION *Ruts*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust - Moderate Dust - Severe Dust -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐ Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		24			Avg. 24
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			5.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)		60			Avg. 60

PASER Rating = 4.2

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Recently graded gravel road. No C&G on segment, except on north side between Main St and 1st. Road ties into Talc Rd, across from Kyd Rd.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **E NEAL ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: RAILWAY AVE	Milepost End: 0.4 MILES	Date: 5/4/2023
Stop: 7TH AVE E	Length: 0.4 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Transverse*	Cracks are sealed		Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Alligator*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PATCHES			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	10.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	15			Avg.15
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 8.5

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Street is 48' wide from Railroad Ave. to E. 1st Ave., then narrows to the typical 42' east of E First. Street runs in front of Three Forks High School and Elementary School, and has curb and gutter from 1st Ave. E to 5th Ave. E for most of it's length. No curb from 5th Ave E. to 7th Ave. E.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name:	Milepost Begin:	Inspected By:
E OAK ST	0.0 MILES	JIM GOLD
Start:	Milepost End:	Date:
RAILWAY AVE	0.4 MILES	5/4/2023
Stop:	Length:	Posted Speed:
7TH AVE E	0.4 MILES	15 MPH

Roadway Surface Condition	**Comments**	**Degree**	**Type**	**Area % Affected** 0-15% Value	16-30% Value	>30% Value	**Score**
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)	Signs of ponding on west segment.	Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☑ ☐	☐ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☐ ☑ ☐	☐ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Transverse*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Alligator*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☑ ☐	☐ ☐ ☐	☐ ☐ ☐	8.0
PATCHES			Slight Moderate Severe	☐ ☑ ☐	☐ ☐ ☐	☐ ☐ ☐	8.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0

Roadway Geometry & Traffic Control	**Comments**	**General Condition**	**Type**	**Area % Affected** 0-15% Value	16-30% Value	>30% Value	**Score**
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	12			Avg.12
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 7.7

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Street consists of 2 segments, the first starting at Railroad Ave. to 2nd Ave. and the second, from E 4th Ave to E 7th Ave. The Three Forks elementary and High School parking lot divides the two segments. A recently constructed parking lot is between E 4th Ave. and E 5th Ave, north of E Oak St. E Oak St. is rougher between Railroad Ave and 2nd Ave. than the east segment, more like an alley with patches, deteriorating pavement , and sealed cracks. The western segment is like the other streets; 30' wide smooth overlay

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **FRONTAGE RD**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: S OREGON ST	Milepost End: 0.4 MILES	Date: 5/12/2023
Stop: N MAIN ST	Length: 0.4 MILES	Posted Speed: 25 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	6.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Transverse*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Alligator*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
PATCHES			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	13			Avg.13
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 8.1

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

2 lane highway, major artery through town. No c&g, except at drive-in and adjacent to Main Street.

GreatWest ENGINEERING

CITY OF THREE FORKS
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **N ILLINOIS ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: FRONTAGE RD	Milepost End: 0.2 MILES	Date: 5/8/2023
Stop: W JEFFERSON ST	Length: 0.2 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep - 2"-4" deep - <2" deep -	*Angularity* ☑ Good ☐ Poor	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	4.0
SURFACE DEFORMATION *Washboarding*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	3.0
SURFACE DEFORMATION *Potholes*		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	3.0
SURFACE DEFORMATION *Ruts*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust - Moderate Dust - Severe Dust -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐ Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		25	25		Avg. 25
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)		\					
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			5.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)		60			Avg. 60

PASER Rating = 3.9

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

No curb & gutter. Street is 30' wide from Frontage to Milwaukee, then narrows to 25' with some side lane parking areas.

GreatWest ENGINEERING

CITY OF THREE FORKS
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **S IOWA ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: W MILWAUKEE ST	Milepost End: 0.1 MILES	Date: 5/8/2023
Stop: W JEFFERSON ST	Length: 0.1 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding -	Slight	☐	☐	☐	3.0
		Moderate Ponding -	Moderate	☐	☑	☐	
		Severe Ponding -	Severe	☐	☐	☐	
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep -	*Angularity*	☐	☐	☑	5.0
		2"-4" deep -	☑ Good	☐	☐	☐	
		<2" deep -	☐ Poor	☐	☐	☐	
SURFACE DEFORMATION *Washboarding*		<1" deep -	Slight	☐	☐	☐	3.0
		1"-3" deep -	Moderate	☐	☑	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Potholes*		<2" deep -	Slight	☐	☐	☐	3.0
		2"-4" deep -	Moderate	☐	☑	☐	
		>4" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Ruts*		<1" deep -	Slight	☐	☐	☑	4.0
		1"-3" deep -	Moderate	☐	☐	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps -	Slight	☐	☑	☐	4.0
		Rough Ride -	Moderate	☐	☐	☐	
		Speed Reduction -	Severe	☐	☐	☐	
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust -	Slight	☐	☑	☐	4.0
		Moderate Dust -	Moderate	☐	☐	☐	
		Severe Dust -	Severe	☐	☐	☐	

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section -	Good	☐	☑	☐	4.0
		Flat Section -	Slight	☐	☐	☐	
		Negative Crown -	Severe	☐	☐	☐	
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐	4:1 (or better) -	Recoverable	☐	☐	☐	
	Not Applicable ☑	4:1 to 3:1 -	Traversable	☐	☐	☐	
		Steeper than 3:1 -	Too Steep	☐	☐	☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		25	25		Avg. 25
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)		\					
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑	Placard Missing ☐	Remove Sign ☐			5.0
		Bullet Holes ☐	Need Add'l Items ☐	New Signs Req'd ☐			
		Damage ☐	Sign Post Damage ☐	# Signs	0		
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft)		60			Avg. 60
		Width: Obstruction to Fenceline (ft)					
		Width: Obstruction to Obstruction (ft)					

PASER Rating = 3.9

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

No curb & gutter. Some ponding at intersection of Iowa and Milwaukee. Street segment is 25' wide, with additional side parking lanes. Sidewalks along street are stamped 1912.

GreatWest ENGINEERING

CITY OF THREE FORKS
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **E JEFFERSON ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: N MONTANA ST	Milepost End: 0.6 MILES	Date: 5/8/2023
Stop: W FRONT ST	Length: 0.6 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep - 2"-4" deep - <2" deep -	*Angularity* ☑ Good ☐ Poor	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	5.0
SURFACE DEFORMATION *Washboarding*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	3.0
SURFACE DEFORMATION *Potholes*		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☑ ☐	☐ ☐ ☐	☐ ☐ ☐	4.0
SURFACE DEFORMATION *Ruts*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☑ ☐	☐ ☐ ☐	☐ ☐ ☐	4.0
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust - Moderate Dust - Severe Dust -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐ Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		25	25		Avg. 25
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			5.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)		60			Avg. 60

PASER Rating = 4.1

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Western most segment. No curb & gutter. Potholes seem to be largely in front of driveways. Road has not yet been graded, post winter - per Fed-Ex driver. Starts as E Jefferson, changes to W Jefferson at Iowa. 9' wide paved bike/walking path on west side of street. Blade.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **KYD RD**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: TALC RD	Milepost End: 0.6 MILES	Date: 5/8/2023
Stop: COLTER TRAIL	Length: 0.6 MILES	Posted Speed: 25 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Transverse*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Alligator*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PATCHES			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☐	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	6.0
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	 12	 	 	 Avg.12
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 8.1

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

County road, accesses to Colter Trail. 24' wide, it's a good county road.

GreatWest ENGINEERING

CITY OF THREE FORKS
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **LINDA LN**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: S KANSAS ST	Milepost End: 0.1 MILES	Date: 5/8/2023
Stop: S OREGON ST	Length: 0.1 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep - 2"-4" deep - <2" deep -	*Angularity* ☑ Good ☐ Poor	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	5.0
SURFACE DEFORMATION *Washboarding*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	3.0
SURFACE DEFORMATION *Potholes*		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☑ ☐	☐ ☐ ☐	☐ ☐ ☐	4.0
SURFACE DEFORMATION *Ruts*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust - Moderate Dust - Severe Dust -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐ Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		25	25		Avg. 25
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			5.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)		60			Avg. 60

PASER Rating = 4.1

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

No curb & gutter, potholes largely in front of driveways. Signs of ponding. Road is slightly washboardy.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **LINDA LN**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: S KANSAS ST	Milepost End: 0.1 MILES	Date: 5/8/2023
Stop: M.P. END - 0.3	Length: 0.1 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)	One puddle at cul-de-sac.	Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Transverse*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Longitudinal*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Alligator*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
PATCHES			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	25			Avg.25
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 8.5

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

The Mayor's road, pavement or millings is in good shape. Road ends in Cul-de-sac, one puddle there, pavement slightly deteriorated.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **MAIN ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: E IVY ST	Milepost End: 0.6 MILES	Date: 5/4/2023
Stop: RAILWAY AVE	Length: 0.6 MILES	Posted Speed: 25 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	6.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Transverse*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Alligator*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PATCHES			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	12			Avg.12
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 7.9

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Primary artery through town. Road consists of 2 12' driving lanes with parking areas on each side. Width of the parking areas vary, but are generally 25' wide. Parking is either diagonal or perpendicular. Main Street merges into Railroad Ave. No curb & gutter from E Ivy to E Fir. Sidewalks, curb and gutter vary from E. Fir to Railroad Ave.

GreatWest ENGINEERING

CITY OF THREE FORKS
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **W ARIZONA ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: W ADAMS ST	Milepost End: 0.0 MILES	Date: 5/8/2023
Stop: E JEFFERSON ST	Length: 0.0 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep - 2"-4" deep - <2" deep -	*Angularity* ☑ Good ☐ Poor	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	5.0
SURFACE DEFORMATION *Washboarding*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
SURFACE DEFORMATION *Potholes*		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
SURFACE DEFORMATION *Ruts*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust - Moderate Dust - Severe Dust -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐ Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		25	25		Avg. 25
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)		\					
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			5.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)		60			Avg. 60

PASER Rating = 4.2

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Short block. No curb & gutter. Street 25' with some side lane parking areas. Street hasn't had any gravel added reciently.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **W CALIFORNIA ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: RAILWAY AVE	Milepost End: 0.1 MILES	Date: 5/8/2023
Stop: E FRONT ST	Length: 0.1 MILES	Posted Speed: 25 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Transverse*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Alligator*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
PATCHES			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	16			Avg.16
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 8.1

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Street starts at Railroad Ln, Paved, w/ c&g.

GreatWest ENGINEERING

CITY OF THREE FORKS
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **N COLORADO ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: W MILWAUKEE ST	Milepost End: 0.1 MILES	Date: 5/8/2023
Stop: W JEFFERSON ST	Length: 0.1 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep - 2"-4" deep - <2" deep -	*Angularity* ☑ Good ☐ Poor	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	4.0
SURFACE DEFORMATION *Washboarding*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	3.0
SURFACE DEFORMATION *Potholes*		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
SURFACE DEFORMATION *Ruts*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	3.0
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust - Moderate Dust - Severe Dust -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐ Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		25	25		Avg. 25
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)		\					
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			5.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)		60			Avg. 60

PASER Rating = 3.9

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

No curb & gutter. Street 25' with some side lane parking areas. Street hasn't had any gravel added reciently, Street seems to have more dirt than the others.

GreatWest ENGINEERING

CITY OF THREE FORKS
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **N DAKOTA ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: RAILWAY AVE	Milepost End: 0.1 MILES	Date: 5/8/2023
Stop: W JEFFERSON ST	Length: 0.1 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding -	Slight	☐	☐	☑	4.0
		Moderate Ponding -	Moderate	☐	☐	☐	
		Severe Ponding -	Severe	☐	☐	☐	
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep -	*Angularity*	☐	☐	☐	4.0
		2"-4" deep -	☑ Good	☐	☑	☐	
		<2" deep -	☐ Poor	☐	☐	☐	
SURFACE DEFORMATION *Washboarding*		<1" deep -	Slight	☐	☐	☐	3.0
		1"-3" deep -	Moderate	☐	☑	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Potholes*		<2" deep -	Slight	☐	☐	☑	4.0
		2"-4" deep -	Moderate	☐	☐	☐	
		>4" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Ruts*		<1" deep -	Slight	☐	☐	☐	3.0
		1"-3" deep -	Moderate	☐	☑	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps -	Slight	☐	☑	☐	4.0
		Rough Ride -	Moderate	☐	☐	☐	
		Speed Reduction -	Severe	☐	☐	☐	
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust -	Slight	☐	☑	☐	4.0
		Moderate Dust -	Moderate	☐	☐	☐	
		Severe Dust -	Severe	☐	☐	☐	

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section -	Good	☐	☑	☐	4.0
		Flat Section -	Slight	☐	☐	☐	
		Negative Crown -	Severe	☐	☐	☐	
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐	4:1 (or better) -	Recoverable	☐	☐	☐	
	Not Applicable ☑	4:1 to 3:1 -	Traversable	☐	☐	☐	
		Steeper than 3:1 -	Too Steep	☐	☐	☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		25	25		Avg. 25
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)		\					
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑	Placard Missing ☐	Remove Sign ☐			5.0
		Bullet Holes ☐	Need Add'l Items ☐	New Signs Req'd ☐			
		Damage ☐	Sign Post Damage ☐	# Signs	0		
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft)		60			Avg. 60
		Width: Obstruction to Fenceline (ft)					
		Width: Obstruction to Obstruction (ft)					

PASER Rating = 3.9

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

No curb & gutter. Dakota begins at the end of West Elm. Street 25' with some side lane parking areas.

GreatWest ENGINEERING

CITY OF THREE FORKS
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **N GEORGIA ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: W MILWAUKEE ST	Milepost End: 0.2 MILES	Date: 5/8/2023
Stop: W JEFFERSON ST	Length: 0.2 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep - 2"-4" deep - <2" deep -	*Angularity* ☑ Good ☐ Poor	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	4.0
SURFACE DEFORMATION *Washboarding*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
SURFACE DEFORMATION *Potholes*		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
SURFACE DEFORMATION *Ruts*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	3.0
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust - Moderate Dust - Severe Dust -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐ Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		25	25		Avg. 25
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)		\					
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			5.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)		60			Avg. 60

PASER Rating = 4.0

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

No curb & gutter. Street is 25' wide with some side lane parking areas.

GreatWest ENGINEERING

CITY OF THREE FORKS
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **N JEFFERSON**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: M.P. BEGIN - 0.0	Milepost End: 0.1 MILES	Date: 5/8/2023
Stop: M.P. END - 0.1	Length: 0.1 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep - 2"-4" deep - <2" deep -	*Angularity* ☑ Good ☐ Poor	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	5.0
SURFACE DEFORMATION *Washboarding*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
SURFACE DEFORMATION *Potholes*		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	3.0
SURFACE DEFORMATION *Ruts*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	3.0
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☑ ☐	☐ ☐ ☐	☐ ☐ ☐	4.0
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust - Moderate Dust - Severe Dust -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐ Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		20	22		Avg. 21
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			5.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)		60			Avg. 60

PASER Rating = 4.0

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Short gravel road, edge of city limits.

GreatWest ENGINEERING

CITY OF THREE FORKS
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **N MONTANA ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: E FRONT ST	Milepost End: 0.1 MILES	Date: 5/8/2023
Stop: E JEFFERSON ST	Length: 0.1 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep - 2"-4" deep - <2" deep -	*Angularity* ☑ Good ☐ Poor	☐ ☐ ☐	☐ ☑ ☐	☑ ☐ ☐	4.0
SURFACE DEFORMATION *Washboarding*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	3.0
SURFACE DEFORMATION *Potholes*		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	3.0
SURFACE DEFORMATION *Ruts*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust - Moderate Dust - Severe Dust -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐ Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		25	25		Avg. 25
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)		\					
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			5.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)		60			Avg. 60

PASER Rating = 3.9

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Short block. No curb & gutter. 9' wide biking/running trail on North side of road. Street is 22' wide with some side parking lanes. Grade

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **RAILWAY AVE**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: W ASH ST	Milepost End: 0.3 MILES	Date: 5/12/2023
Stop: N 2ND AVE E	Length: 0.3 MILES	Posted Speed: 25 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Transverse*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Longitudinal*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Alligator*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PATCHES			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	12			Avg.12
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☐ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 8.3

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Main arterial to North. 2 lane highway, 24' wide with parking areas on both sides. No c&g except along the Sacajawea hotel lot.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **S OREGON ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: LINDA LN	Milepost End: 0.1 MILES	Date: 5/8/2023
Stop: FRONTAGE RD	Length: 0.1 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Transverse*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Alligator*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
PATCHES			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	25	25		Avg.25
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 8.6

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Segment starts 1/2 block west of Linda Ln. Pavement is in good shape.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **TALC RD**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: KYD RD	Milepost End: 1.1 MILES	Date: 5/8/2023
Stop: HWY 2	Length: 1.1 MILES	Posted Speed: 25 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Transverse*	cracks are sealed		Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Alligator*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PATCHES			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☐	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☑	☐ ☐ ☐	☐ ☑ ☐	1.0
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	 12	 	 	 Avg.12
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☐ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 7.6

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

City road, 24' wide. There is a drainage ditch on the east side that is approx 8' deep with a steep slope off of the highway.

GreatWest ENGINEERING

CITY OF HAVRE
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **W ADAMS ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: W FRONT ST	Milepost End: 0.6 MILES	Date: 5/8/2023
Stop: N MONTANA ST	Length: 0.6 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep - 2"-4" deep - <2" deep -	*Angularity* ☑ Good ☐ Poor	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	5.0
SURFACE DEFORMATION *Washboarding*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	3.0
SURFACE DEFORMATION *Potholes*		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	3.0
SURFACE DEFORMATION *Ruts*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust - Moderate Dust - Severe Dust -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐ Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		25	25		Avg. 25
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			5.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)		60			Avg. 60

PASER Rating = 4.0

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

No curb& gutter, potholes largely in front of driveways. Signs of ponding at intersections. Street signs change from W Adams to E Adams at Iowa.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **W CEDAR ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: 1ST AVE W	Milepost End: 0.1 MILES	Date: 5/4/2023
Stop: N MAIN ST	Length: 0.1 MILES	Posted Speed: 25 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Transverse*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Alligator*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PATCHES			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	10.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	12.5			Avg.12.5
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 8.4

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

1 block segment. Street is 52' wide with diagonal parking on the south side and parallel parking on the north side. Street has sidewalks but no curb& gutter.

GreatWest ENGINEERING

CITY OF THREE FORKS
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **W DATE ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: FRONTAGE RD	Milepost End: 0.1 MILES	Date: 5/12/2023
Stop: RAILWAY AVE	Length: 0.1 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding -	Slight	☐	☐	☐	3.0
		Moderate Ponding -	Moderate	☐	☑	☐	
		Severe Ponding -	Severe	☐	☐	☐	
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep -	*Angularity*	☐	☐	☑	5.0
		2"-4" deep -	☑ Good	☐	☐	☐	
		<2" deep -	☐ Poor	☐	☐	☐	
SURFACE DEFORMATION *Washboarding*		<1" deep -	Slight	☐	☐	☐	4.0
		1"-3" deep -	Moderate	☑	☐	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Potholes*		<2" deep -	Slight	☐	☐	☐	3.0
		2"-4" deep -	Moderate	☐	☑	☐	
		>4" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Ruts*		<1" deep -	Slight	☐	☐	☐	4.0
		1"-3" deep -	Moderate	☑	☐	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps -	Slight	☐	☐	☐	4.0
		Rough Ride -	Moderate	☑	☐	☐	
		Speed Reduction -	Severe	☐	☐	☐	
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust -	Slight	☐	☐	☐	4.0
		Moderate Dust -	Moderate	☑	☐	☐	
		Severe Dust -	Severe	☐	☐	☐	

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section -	Good	☐	☑	☐	4.0
		Flat Section -	Slight	☐	☐	☐	
		Negative Crown -	Severe	☐	☐	☐	
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐	4:1 (or better) -	Recoverable	☐	☐	☐	
	Not Applicable ☑	4:1 to 3:1 -	Traversable	☐	☐	☐	
		Steeper than 3:1 -	Too Steep	☐	☐	☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		30'	28'		
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑	Placard Missing ☐	Remove Sign ☐			5.0
		Bullet Holes ☐	Need Add'l Items ☐	New Signs Req'd ☐			
		Damage ☐	Sign Post Damage ☐	# Signs	0		
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft)		60			Avg. 60
		Width: Obstruction to Fenceline (ft)					
		Width: Obstruction to Obstruction (ft)					

PASER Rating = 4.0

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Segment is a gravel street from Frontage Rd. to Railroad Ave. The street is roughly 30' wide with side parking. No curb & gutter and just a couple short segments of sidewalk. One larger pond/pothole at the intersection with 1st Ave. W.

GreatWest ENGINEERING

CITY OF THREE FORKS
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **W ELM ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: FRONTAGE RD	Milepost End: 0.0 MILES	Date: 5/9/2023
Stop: RAILWAY AVE	Length: 0.0 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding -	Slight	☐	☐	☑	4.0
		Moderate Ponding -	Moderate	☐	☐	☐	
		Severe Ponding -	Severe	☐	☐	☐	
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep -	*Angularity*	☐	☐	☐	4.0
		2"-4" deep -	☑ Good	☐	☑	☐	
		<2" deep -	☐ Poor	☐	☐	☐	
SURFACE DEFORMATION *Washboarding*		<1" deep -	Slight	☐	☐	☐	3.0
		1"-3" deep -	Moderate	☐	☑	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Potholes*		<2" deep -	Slight	☐	☐	☐	3.0
		2"-4" deep -	Moderate	☐	☑	☐	
		>4" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Ruts*		<1" deep -	Slight	☐	☐	☑	4.0
		1"-3" deep -	Moderate	☐	☐	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps -	Slight	☐	☐	☐	3.0
		Rough Ride -	Moderate	☐	☑	☐	
		Speed Reduction -	Severe	☐	☐	☐	
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust -	Slight	☐	☐	☑	4.0
		Moderate Dust -	Moderate	☐	☐	☐	
		Severe Dust -	Severe	☐	☐	☐	

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section -	Good	☐	☑	☐	4.0
		Flat Section -	Slight	☐	☐	☐	
		Negative Crown -	Severe	☐	☐	☐	
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐	4:1 (or better) -	Recoverable	☐	☐	☐	
	Not Applicable ☑	4:1 to 3:1 -	Traversable	☐	☐	☐	
		Steeper than 3:1 -	Too Steep	☐	☐	☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		30	30		Avg. 30
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑	Placard Missing ☐	Remove Sign ☐			5.0
		Bullet Holes ☐	Need Add'l Items ☐	New Signs Req'd ☐			
		Damage ☐	Sign Post Damage ☐	# Signs	0		
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft)		60			Avg. 60
		Width: Obstruction to Fenceline (ft)					
		Width: Obstruction to Obstruction (ft)					

PASER Rating = 3.8

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

1 block gravel road, no c&g, ties into Dakota St.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **W ELM ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: N MAIN ST	Milepost End: 0.1 MILES	Date: 5/9/2023
Stop: FRONTAGE RD	Length: 0.1 MILES	Posted Speed: 25 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Transverse*	Cracks are sealed		Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Alligator*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PATCHES			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	15			Avg.15
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 8.4

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Segment is 1 1/2 blocks long, and is 30' wide, chip sealed .

GreatWest ENGINEERING

CITY OF THREE FORKS
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **W FIR ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: MAIN ST	Milepost End: 0.1 MILES	Date: 5/9/2023
Stop: 2ND AVE W	Length: 0.1 MILES	Posted Speed: 25 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding -	Slight	☐	☐	☑	4.0
		Moderate Ponding -	Moderate	☐	☐	☐	
		Severe Ponding -	Severe	☐	☐	☐	
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep -	*Angularity*	☐	☐	☐	4.0
		2"-4" deep -	☑ Good	☐	☑	☐	
		<2" deep -	☐ Poor	☐	☐	☐	
SURFACE DEFORMATION *Washboarding*		<1" deep -	Slight	☐	☐	☐	3.0
		1"-3" deep -	Moderate	☐	☑	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Potholes*		<2" deep -	Slight	☐	☐	☐	3.0
		2"-4" deep -	Moderate	☐	☑	☐	
		>4" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Ruts*		<1" deep -	Slight	☐	☐	☑	4.0
		1"-3" deep -	Moderate	☐	☐	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps -	Slight	☐	☐	☐	3.0
		Rough Ride -	Moderate	☐	☑	☐	
		Speed Reduction -	Severe	☐	☐	☐	
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust -	Slight	☐	☐	☑	4.0
		Moderate Dust -	Moderate	☐	☐	☐	
		Severe Dust -	Severe	☐	☐	☐	

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section -	Good	☐	☑	☐	4.0
		Flat Section -	Slight	☐	☐	☐	
		Negative Crown -	Severe	☐	☐	☐	
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐	4:1 (or better) -	Recoverable	☐	☐	☐	
	Not Applicable ☑	4:1 to 3:1 -	Traversable	☐	☐	☐	
		Steeper than 3:1 -	Too Steep	☐	☐	☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		30	30		Avg. 30
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑	Placard Missing ☐	Remove Sign ☐			5.0
		Bullet Holes ☐	Need Add'l Items ☐	New Signs Req'd ☐			
		Damage ☐	Sign Post Damage ☐	# Signs	0		
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft)		60			Avg. 60
		Width: Obstruction to Fenceline (ft)					
		Width: Obstruction to Obstruction (ft)					

PASER Rating = 3.8

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

W Fir is 30' wide with side parking lanes. No c&g.

GreatWest ENGINEERING

CITY OF HAVRE
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **W FRONT ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: FRONT RD	Milepost End: 0.2 MILES	Date: 5/8/2023
Stop: S IOWA ST	Length: 0.2 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep - 2"-4" deep - <2" deep -	*Angularity* ☑ Good ☐ Poor	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	5.0
SURFACE DEFORMATION *Washboarding*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	3.0
SURFACE DEFORMATION *Potholes*		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	3.0
SURFACE DEFORMATION *Ruts*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	3.0
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust - Moderate Dust - Severe Dust -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐ Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		25	25		Avg. 25
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			5.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)		60			Avg. 60

PASER Rating = 3.9

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Segment starts at the intersection with W Jefferson and Front Rd. thn turns NE at the intersection with W Front St. Pavement begains at Iowa. No curb & gutter. Signs of ponding at intersections.

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **W FRONT ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: S IOWA ST	Milepost End: 0.4 MILES	Date: 5/8/2023
Stop: N MONTANA ST	Length: 0.4 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	6.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Transverse*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Alligator*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	6.0
PATCHES			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	12.5			Avg.12.5
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 7.5

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

No curb & gutter. 24' wide wide overlay on top of older pavement. North of California, street widens to 28' with side parking lanes. to Signs of ponding along edges. At intersection with Montana, pavement degrades into gravel, street continues to North East.

GreatWest ENGINEERING

CITY OF THREE FORKS
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **W GROVE ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: 2ND AVE W	Milepost End: 0.1 MILES	Date: 5/9/2023
Stop: FRONTAGE RD	Length: 0.1 MILES	Posted Speed: 25 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding -	Slight	☐	☐	☑	4.0
		Moderate Ponding -	Moderate	☐	☐	☐	
		Severe Ponding -	Severe	☐	☐	☐	
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep -	*Angularity*	☐	☑	☐	5.0
		2"-4" deep -	☑ Good	☐	☐	☐	
		<2" deep -	☐ Poor	☐	☐	☐	
SURFACE DEFORMATION *Washboarding*		<1" deep -	Slight	☐	☐	☐	3.0
		1"-3" deep -	Moderate	☐	☑	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Potholes*		<2" deep -	Slight	☐	☐	☐	3.0
		2"-4" deep -	Moderate	☐	☑	☐	
		>4" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Ruts*		<1" deep -	Slight	☐	☐	☑	4.0
		1"-3" deep -	Moderate	☐	☐	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps -	Slight	☐	☐	☐	3.0
		Rough Ride -	Moderate	☐	☑	☐	
		Speed Reduction -	Severe	☐	☐	☐	
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust -	Slight	☐	☐	☑	4.0
		Moderate Dust -	Moderate	☐	☐	☐	
		Severe Dust -	Severe	☐	☐	☐	

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section -	Good	☐	☑	☐	4.0
		Flat Section -	Slight	☐	☐	☐	
		Negative Crown -	Severe	☐	☐	☐	
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐	4:1 (or better) -	Recoverable	☐	☐	☐	
	Not Applicable ☑	4:1 to 3:1 -	Traversable	☐	☐	☐	
		Steeper than 3:1 -	Too Steep	☐	☐	☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		28	24		Avg. 26
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑	Placard Missing ☐	Remove Sign ☐			5.0
		Bullet Holes ☐	Need Add'l Items ☐	New Signs Req'd ☐			
		Damage ☐	Sign Post Damage ☐	# Signs	0		
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft)		60			Avg. 60
		Width: Obstruction to Fenceline (ft)					
		Width: Obstruction to Obstruction (ft)					

PASER Rating = 3.9

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

W. Grove changes to gravel on 2nd St W. and connects to Frontage Rd. No C&G except for 1/2 block southwest past 2nd St. Blade

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **W GROVE ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: S MAIN ST	Milepost End: 0.1 MILES	Date: 5/9/2023
Stop: 2ND AVE W	Length: 0.1 MILES	Posted Speed: 25 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Transverse*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
CRACKS *Alligator*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
PATCHES			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	15			Avg.15
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 8.2

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Paved street from Main to 2nd. Segment is 30' wide over lay over existing older pavement. There are side parking lanes. Street has been chip sealed. Cracks have been sealed.

GreatWest ENGINEERING

CITY OF THREE FORKS
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **W HICKORY ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: 3RD AVE W	Milepost End: 0.1 MILES	Date: 5/9/2023
Stop: 5TH AVE W	Length: 0.1 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep - 2"-4" deep - <2" deep -	*Angularity* ☑ Good ☐ Poor	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	5.0
SURFACE DEFORMATION *Washboarding*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	3.0
SURFACE DEFORMATION *Potholes*		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	3.0
SURFACE DEFORMATION *Ruts*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☐ ☑ ☐	☐ ☐ ☐	3.0
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust - Moderate Dust - Severe Dust -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐ Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		22	24		Avg. 23
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			5.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)		60			Avg. 60

PASER Rating = 3.9

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

W Hickory changes to gravel on 3rd W. and ends at a dead end. The dead end is nearly lined up with 5th W, but does not connect to Frontage Rd. Street shows rtecient addition of gravel, has not been bladed in awhile. .

GreatWest ENGINEERING

CITY OF THREE FORKS
SURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **W HICKORY ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: S MAIN ST	Milepost End: 0.2 MILES	Date: 5/9/2023
Stop: 3RD AVE W	Length: 0.2 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
SURFACE DEFECTS Raveling - Loss of pavement material from the surface downward			Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFECTS Flushing - excess asphalt on the surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFECTS Polishing - Wearing of aggregate edges to make a smooth slippery surface			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	7.0
SURFACE DEFORMATION *Rutting*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
SURFACE DEFORMATION *Distortion*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Transverse*	Cracks have been sealed		Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Longitudinal*			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
CRACKS *Alligator*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
CRACKS *Other - (Block, Slippage, & Reflection)*			Slight Moderate Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
POTHOLES		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
PATCHES			Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0
RIDE QUALITY		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	8.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☑ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	9.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements) Surfacing Width (ft, 3 Measurements) No. Lanes: 2	Lane Width:	15			Avg.15
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			10.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)					

PASER Rating = 8.3

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Street segment is paved for 3 blocks and is typical of surrounding streets. Street is 30' wide overlay over older asphalt. 25' diving lanes have been chipsealed. Generally, no curb&gutter on this street, although there is a short section of pin down curb in front of one lot. Varying side parking lanes along the street.

GreatWest ENGINEERING

CITY OF THREE FORKS
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **W IVY ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: MAIN ST	Milepost End: 0.3 MILES	Date: 5/9/2023
Stop: 5TH AVE W	Length: 0.3 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding -	Slight	☐	☐	☑	4.0
		Moderate Ponding -	Moderate	☐	☐	☐	
		Severe Ponding -	Severe	☐	☐	☐	
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep -	*Angularity*	☐	☑	☐	5.0
		2"-4" deep -	☑ Good	☐	☐	☐	
		<2" deep -	☐ Poor	☐	☐	☐	
SURFACE DEFORMATION *Washboarding*		<1" deep -	Slight	☐	☐	☐	3.0
		1"-3" deep -	Moderate	☐	☑	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Potholes*		<2" deep -	Slight	☐	☐	☐	3.0
		2"-4" deep -	Moderate	☐	☑	☐	
		>4" deep -	Severe	☐	☐	☐	
SURFACE DEFORMATION *Ruts*		<1" deep -	Slight	☐	☐	☐	3.0
		1"-3" deep -	Moderate	☐	☑	☐	
		>3" deep -	Severe	☐	☐	☐	
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps -	Slight	☐	☐	☐	3.0
		Rough Ride -	Moderate	☐	☑	☐	
		Speed Reduction -	Severe	☐	☐	☐	
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust -	Slight	☐	☐	☑	4.0
		Moderate Dust -	Moderate	☐	☐	☐	
		Severe Dust -	Severe	☐	☐	☐	

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section -	Good	☐	☑	☐	4.0
		Flat Section -	Slight	☐	☐	☐	
		Negative Crown -	Severe	☐	☐	☐	
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐	4:1 (or better) -	Recoverable	☐	☐	☐	
	Not Applicable ☑	4:1 to 3:1 -	Traversable	☐	☐	☐	
		Steeper than 3:1 -	Too Steep	☐	☐	☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		22	24		Avg. 23
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑	Placard Missing ☐	Remove Sign ☐			5.0
		Bullet Holes ☐	Need Add'l Items ☐	New Signs Req'd ☐			
		Damage ☐	Sign Post Damage ☐	# Signs	0		
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft)		60			Avg. 60
		Width: Obstruction to Fenceline (ft)					
		Width: Obstruction to Obstruction (ft)					

PASER Rating = 3.8

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

Building and some road construction just west of Main. Paving machine parked near construction site. Road is adjacent to Airport property.

GreatWest ENGINEERING

CITY OF THREE FORKS
UNSURFACED ROAD INVENTORY DATA
PASER Evaluation

Road Name: **W MILWAUKEE ST**	Milepost Begin: 0.0 MILES	Inspected By: JIM GOLD
Start: S KANSAS ST	Milepost End: 0.3 MILES	Date: 5/8/2023
Stop: S CALIFORNIA ST	Length: 0.3 MILES	Posted Speed: 15 MPH

Roadway Surface Condition	Comments	Degree	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
DRAINAGE (Ability of roadside ditches and under-road culverts to carry water away from the road.)		Slight Ponding - Moderate Ponding - Severe Ponding -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
GRAVEL SURFACING LAYER (Adequate thickness and quality of gravel to carry traffic loads.)		>4" deep - 2"-4" deep - <2" deep -	*Angularity* ☑ Good ☐ Poor	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	5.0
SURFACE DEFORMATION *Washboarding*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
SURFACE DEFORMATION *Potholes*		<2" deep - 2"-4" deep - >4" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
SURFACE DEFORMATION *Ruts*		<1" deep - 1"-3" deep - >3" deep -	Slight Moderate Severe	☐ ☐ ☐	☐ ☐ ☐	☑ ☐ ☐	4.0
SURFACE DEFECTS *Ride Quality Overview* (Percentage of inventory section)		Few Bumps - Rough Ride - Speed Reduction -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
SURFACE DEFECTS *DUST and LOOSE AGGREGATE* (Percentage of inventory section)		Slight Dust - Moderate Dust - Severe Dust -	Slight Moderate Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0

Roadway Geometry & Traffic Control	Comments	General Condition	Type	Area % Affected 0-15% Value	Area % Affected 16-30% Value	Area % Affected >30% Value	Score
CROWN (Height and condition of crown, unrestricted slope)		Crowned Section - Flat Section - Negative Crown -	Good Slight Severe	☐ ☐ ☐	☑ ☐ ☐	☐ ☐ ☐	4.0
PARALLEL SLOPES (Ability of vehicles able to recover if they drive off of road top surface and onto shoulder)	Guardrail Recommended ☐ Not Applicable ☑	4:1 (or better) - 4:1 to 3:1 - Steeper than 3:1 -	Recoverable Traversable Too Steep	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	
ROAD WIDTH		Top Out-to-Out (ft, 3 Measurements)		25	25		Avg. 25
SIGHT DISTANCE (Ability of drivers to see and adapt to obstacles)							
TRAFFIC CONTROL (Adequacy of existing traffic control signage/ signalization)		Good ☑ Bullet Holes ☐ Damage ☐	Placard Missing ☐ Need Add'l Items ☐ Sign Post Damage ☐	Remove Sign ☐ New Signs Req'd ☐ # Signs 0			5.0
RIGHT-OF-WAY (Adequacy of R/W and Assumed Encroachments)		Width: Fenceline-to-fenceline (ft) Width: Obstruction to Fenceline (ft) Width: Obstruction to Obstruction (ft)		60			Avg. 60

PASER Rating = 4.2

OTHER MAINTENANCE/IMPROVEMENTS REQUIRED:

OTHER GENERAL REMARKS:

No curb& gutter, some small potholes and washboarding.

GreatWest ENGINEERING