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1. PROJECT BACKGROUND

1.1. Preamble

In 2007, the Town of Fort Laramie took part in the Community Assessment Program through the Wyoming Rural Development Council (WRDC) in an effort to find ways to address immediate and long term sustainable needs for their community. As a result of the Town’s involvement with the WRDC, they were able to spend time discussing and identifying what they see as the major problems and/or challenges facing their community. Through these discussions they also took time to determine what their community strengths and assets are, as well as what projects they would like to see accomplished over the next 20-years. As a result of these discussions the Town was able to develop a list of priorities they would like to accomplish to improve and sustain their community. Some of these priorities (in no particular order) are as follows:

- Community Vision
- Land Use
- Housing
- Parks & Open Space
- Public Facilities and Infrastructure
- Economic Development
- Design and Historic Preservation
- Safety

As a means of further studying and addressing the above community priorities, the Town was able to apply for and ultimately secure grant funding through the Wyoming business Council to have a Community Development and Strategic Plan completed. The Town has worked with Tom Johnson, Southeast Wyoming Regional Director, of the Wyoming Business Council to assist them in securing this funding and moving forward with the planning process. As a result,
the Town of Fort Laramie hired Baker & Associates, Inc. to complete the following Community Development & Strategic Plan to help move the Town of Fort Laramie forward over the next 10 to 20-years.

The Town of Fort Laramie is a small rural community of 229 people located in the west central portion of Goshen County, Wyoming. The Town is located on US Highway 26 approximately 20-miles northwest of Torrington, Wyoming (County Seat of Goshen County). The population of Fort Laramie has remained fairly stable over the past 20-years, with only minor fluctuations. The Town saw significant population increases during the 1970’s (to about 356 people), only to see this population growth decrease substantially during the 1980’s to the level that they now see. This large population fluctuation was mostly contributed to the rise of the energy boom in the 1970’s, which then fell off during the 1980’s. (See vicinity map on page 6 of this report).

The Town of Fort Laramie is a community with a relatively lower cost of living as compared to the average across Goshen County. The median home value is approximately $100,000, with most of the residents of the community being involved in community/residential type employment as opposed to large commercial/industrial employment. With the population remaining relatively constant over the past 20-years, little, if any, economic growth has occurred in Fort Laramie. In comparing the yearly populations for the town since 2000, we see that the population dropped in the five year period from 2000 to 2005 from 243 to 229, and in the four year period since 2005, the population has remained constant at 229 where it stands today.

The Town of Fort Laramie is approximately 156 acres in size with the developed area of town being 148 acres. Housing throughout town is primarily aged with small residential neighborhoods, and in many instances vacant lots separate homes. Also, there is no school system operating in Fort Laramie. School children who live in town attend school in Lingle, Wyoming, which is about 10-miles east of Fort Laramie. The old school house in Fort Laramie has been renovated into a Community Center (known as the Pioneer Community Center) with additional office space available for lease, along with meeting rooms and gathering areas.
Because Fort Laramie is a small rural community, the number of commercial business enterprises in Town is limited. However, there are several local commercial businesses in Fort Laramie that have become main stays in the community, and provide an economic base for the Town to expand upon. Commercial businesses that are available in Fort Laramie include (but not limited to) the following: three restaurant establishments, two bars, an antique shop, a small Trading Post, a book store, a tea house called “The Gathering Place”, and an arts and craft store called the “Crooked Finger” to name a few. Therefore, the Town does have some active commercial enterprises available to support a limited workforce. However, a good percentage of the people living in Fort Laramie probably commute to jobs outside of town, such as Torrington, Guernsey, Lingle and so forth.

Property surrounding the corporate limits consists primarily of agricultural farm land in addition to property owned and operated by Platte Oil Company and Butte Oil Company. There is a certain amount of property available within the corporate limits for the town to develop. However, infill developable land is limited, and unless the Town is able to develop and expand into new lands, growth within and around Fort Laramie will be marginal at best. Fort Laramie has the benefit of the tourism associated with the Historic Fort Laramie Site. However, it does not appear the Town has been able to take advantage of this tourism resource to its full potential. Therefore, this community development and strategic plan will be looking at alternatives for the town to consider as means of increasing the level of tourism within and around the community.

Having a current and well maintained utility infrastructure is critical to the Town’s ability to grow and become sustainable. Fort Laramie’s existing utility infrastructure (water, sewer, and storm drain type systems) is aged, and does not meet many of the current Wyoming Department of Environmental Quality (WDEQ) design standards. Much of the town’s existing water and sewer utility infrastructure is over 50-years old, and in need of replacement. An up to date utility infrastructure is important to maintain a growing, thriving, and safer community. Recommendations to improve these systems will be discussed later in this development plan in greater detail. Reference the Corporate Limits map on the following page for more information.
Legend

Corporate Limits

SCALE: 1" = 600'

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2. COMMUNITY MISSION STATEMENT, GOALS & POLICIES

As a result of the Community Assessment program and other community forums the Town of Fort Laramie has participated in over the past three years, the town was able to draft a vision statement to help them identify the path the community needs to take to meet their goals for the future. This vision statement simply stated is as follows:

2.1. Fort Laramie Vision Statement

Fort Laramie is a friendly, attractive community with infrastructure, business, and amenities to capitalize on tourism assets and regional opportunities related to Camp Guernsey.

2.2. Fort Laramie Area Community Goals and Policies

This report seeks to develop a strategic community development plan for the Town of Fort Laramie to follow and implement over the next 20-years. As a result of this plan, goals for community development can be realized and achieved, which will allow the Town to grow and become a vibrant community with resources to draw upon. Following is a list of community development goals the Town of Fort Laramie has set to achieve over the next 20-years:

✓ Become a more economically sustainable community.
✓ Develop improved infrastructure.
✓ Develop better affordable housing alternatives.
✓ Improve the Town’s Public Image.
✓ Become an Active Community (Event Coordination & Event Sponsoring).
2.2.1. Development Policies & Goals

In order to achieve these goals, the Town needs to take a look at their existing policies and development procedures to see if they are compatible with promoting positive economic and developmental growth. Communities that have a strong economic base and who experience positive, yet realistic, developmental growth employ several key policies that allow them to focus on business development and community service needs. A summary of key policies that a strong economic based community uses are listed below. This list may not be all inclusive, but it should give Fort Laramie a good idea whether or not their current economic practices conform with these general policies, or if they need to begin moving in a few different directions.

✔ Use zoning and land ownership to allow Fort Laramie to identify target areas where more commercial development can occur.

✔ Identify vacant buildings zoned for commercial and industrial uses that can be remodeled and reused.

✔ Identify undeveloped vacant lots in Town that can be zoned and used for commercial and industrial uses.

✔ Recruitment policies to bring small businesses to the Fort Laramie Area.

✔ Provide for support and training for small business development and opportunities.

✔ Make sure that existing businesses in Fort Laramie are identified in local and County wide Chambers of Commerce, area historical sites (Historic Fort Laramie), Museums, area Motels and other area businesses.
✓ Make sure Realtors throughout Goshen and Platte Counties have on hand community profile and data sheets that list locations and number of vacant lots or lots with building for sale that are located in industrial and commercial area throughout Fort Laramie.

✓ With the Old Historic Fort Laramie located about 2.5 miles from the Town of Fort Laramie, the Town should work with area historical societies to develop a tourist niche or forte that the Town can capitalize on for further economic development.

✓ Develop a Town of Fort Laramie web site that can allow browsers to learn and understand more about the community of Fort Laramie, its local businesses, and other business development opportunities.

✓ Take advantage of other expertise with regard to economic development such as the Goshen County Economic Development Corporation, Wyoming Business Council, Small Business Development Center, High Plains Economic Development District and other similar type organizations that can help assist the Town in addressing their economic development needs and to help existing businesses grow.

2.2.2. Infrastructure Policies & Goals

Another important aspect to realizing and achieving economic growth for the Town of Fort Laramie is to improve upon the Town’s existing infrastructure, and in particular, the Town’s existing water, sewer, waste water treatment and streets. To achieve this goal, the Town will need to try and implement some of the following policy changes:

✓ Develop a comprehensive plan detailing schedules, costs and priorities on how best to upgrade the Town’s existing infrastructure.
✓ Develop a financial plan that will help identify the funding options available to the community to help finance the necessary improvements.

✓ Begin aggressively seeking financial assistance for priority projects by completing necessary grant and loan applications. Speaking with organizations such as the Wyoming Water Development Commission, Wyoming Department of Environmental Quality, the Wyoming Business Council, Goshen County Economic Development Corporation, USDA Rural Development, the Wyoming Community Development Authority and other such organizations to help in this process.

✓ Public notification is important when communities seek to address significant upgrades to the town's infrastructure. Identifying deficiencies and the need for the improvement will help ease some of the concerns over the high cost of construction and resulting utility fee rate structure for the Town.

✓ Complete a utility rate study to show what the Town should be charging their residents in order to provide them with a safe functioning utility infrastructure. Most rural communities in the State of Wyoming charge insufficient utility rates, and as a result, they are not able to keep up with proper maintenance and repair of their systems. The State of Wyoming requires that all local governmental run utilities operate as an enterprise system (i.e. it needs to be able to pay for itself).

✓ Implement the necessary improvements.
2.2.3. Housing Policies & Goals

Housing needs have become critical throughout Goshen County. To address the housing goals for the Town of Fort Laramie, the following policies should be considered for implementation to provide safe, affordable and available housing:

✓ Inventory land in Town that is zoned for residential use, and determine if property owner is interested in developing property.

✓ Develop zoning ordinances (if none exist) to allow for multi-family or low density housing opportunities to help address immediate housing needs for the area.

✓ Host informational meetings for private land owners with the State of Wyoming housing program(s), Goshen County Economic Development Corporation, USDA Rural Development and other similar organizations to help educate the general public (particularly land owners) to discuss resources for housing construction and upgrades.

✓ Work with developers, financial institutions and government agencies (i.e. Wyoming Community Development Authority, the US Department of Agriculture, and other state and federal housing programs) to assist in the financing and development an owner occupied and rental housing market.

✓ Study homesteading programs as an option to stimulate new population growth in the Town of Fort Laramie and surrounding area.
2.2.4. Historic Preservation Policies & Goals

Historic/Museum (Tourism) is an arena the Town of Fort Laramie needs to try and exploit to take advantage of the Historic Fort Laramie site. In doing so, the Town should try and implement some or all of the following policies:

✓ Develop an information packet with maps and historical background information of the Fort Laramie area to be distributed to local businesses, the Historic Fort Laramie and Town Hall.

✓ The Wyoming Department of Transportation (WYDOT) can be a good resource to help develop pathways, scenic by-ways and trails with interpretive maps and historic information markers specific to the Fort Laramie area.

✓ Develop a “Historic Preservation” theme for the community that can be used as a guide to redevelop the downtown area of Fort Laramie along North Laramie Street (Main St).

✓ Identify significant historical information on the Town of Fort Laramie web site that can be readily available for viewing. “Show off the Town” to those seeking to visit.

✓ Work with the Wyoming State Historic Preservation Office (SHPO) and/or the State Tourism Office, and have them list the historic resources that need to be promoted in the Fort Laramie area.

2.2.5. Community Character Policies & Goals

Develop a positive public image. For the Town of Fort Laramie to become a community with a strong economic base, it is important to have a community with a positive public image. That is to say, a community that people want to come and visit or live in that
welcomes business opportunities. In developing a community with a positive public image, the Town of Fort Laramie should try and implement some or all of the following policies:

✓ A clean community is a welcoming community. Fort Laramie should work to provide a clean community that will help attract visitors and businesses to the Town. The Town could hold a community clean-up day each year that focuses on Laramie Avenue, Custer Street, Bliss Street, and Otis Street; and then the rest of Town as needed.

✓ Sponsor a design contest for downtown site and streetscape improvements. This will help insure that the community will buy into a “facelift” for the community.

✓ Create a local or private entity to acquire property and vacant buildings on Laramie Avenue (and other areas of town) for the purpose of future development and reuse.

✓ Another important policy to implement is to make sure all residences and businesses are properly addressed, contact property owners about the need to post address numbers on their house or store fronts. The Town could give them the option of installing their own numbers or having the Town install the numbers for them.

✓ Review all town codes and ordinances to bring them up to date and make decisions regarding enforcement (i.e. weed ordinances, lot cleanliness, and etc.).

2.2.6. Community Activity Policies & Goals

Community Activities are important events for a Town to provide as they work to get the entire community involved in the Town’s growth and development. It helps everyone develop that sense of community pride that can go a long way in allowing Fort Laramie
to become an Active and Attractive community. Some policies the town can employ to help achieve this goal are summarized as follows:

✓ Seasonal events should be considered that allow area residents to come together to develop a sense of community. These events could be sponsored by the Town, and could include a summer Community Picnic in the summer or a Tree Lighting Ceremony in the winter.

✓ Talk to the Goshen County Chamber of Commerce about compiling a list of service clubs and organizations found in Fort Laramie and Goshen County. This will help let residents know what is available and how they can participate.

✓ Provide ‘Welcome Baskets’ to newcomers with information about the town, events, clubs and organizations, donations from area businesses, and coupons.

✓ Use a rotation system of Town Council members to telephone new residents to welcome them to the community. They can also let the newcomers know how they can get in touch with council members or attend the meetings.

✓ Community events associated with the ‘Historic Fort Laramie’ should also be investigated, and not just during the 4th of July Celebration, but at other times during the year. This could have great educational benefits to the community as well.

✓ Provide a simple telephone directory for local residents of Fort Laramie.

✓ Develop and distribute a community calendar that indicates special events, birthdays, celebrations, graduations, and so forth. Include important dates in the community newsletter, and post on web site.
✓ Develop a Community Newsletter that would promote community events and important public news to the residents and visitors of the Town of Fort Laramie. This would help involve more people in the activities throughout the community, and keep everyone better informed of important local government decisions.
3. POPULATION AND ECONOMIC PROJECTIONS

3.1. Population Projection for next 20-Years

As briefly stated earlier, the population for the Town of Fort Laramie has remained constant over the past five to ten years, and has hovered in the range of 230 people during this period. In the early 1980’s the population of Fort Laramie had risen to a peak of about 356 people, and was a fairly vibrant community for its size. However, when the Sunrise Mine shut down in the early 1980’s and work completed on the Gray Rocks Dam, the population of Fort Laramie experienced a significant decline. As a result, the population of Fort Laramie dropped from 356 people in 1980 to 243 people in 1990, a population reduction of 113 over this ten year period. During the decade of the 1990’s, the rate of Fort Laramie’s population decrease slowed down significantly as the Town began to recover from job losses associated with the above mentioned job losses. The population of Fort Laramie in 2000 remained at about 243 people, and since 2000, the population of Fort Laramie has seen a minor decrease in population from 243 in 2000 to 229 in 2005, which is the current average population of the community to this day.

Please reference Appendix A for further population information for Fort Laramie.

Based on the 2009 Community Profile for the Town of Fort Laramie (as developed and provided by the Goshen County Economic Development Corporation (GCEDC)), the demographics for the Town of Fort Laramie can be broken down as shown on Table 3 on the following page:
Table 3 – Fort Laramie Age Demographics

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Number of People</th>
<th>% of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 19</td>
<td>56</td>
<td>23.0</td>
</tr>
<tr>
<td>20 to 44</td>
<td>67</td>
<td>27.6</td>
</tr>
<tr>
<td>45 to 64</td>
<td>63</td>
<td>25.9</td>
</tr>
<tr>
<td>65 and older</td>
<td>57</td>
<td>23.5</td>
</tr>
</tbody>
</table>

A quick analysis of the above Table 3 indicates that the population age demographics seem to be fairly evenly distributed across the various age ranges, with a majority of the population being in the 20 to 64 age bracket (130 people or 53.5% of the population). This age group is the working class age group, and based on the limited employment opportunities provided in Fort Laramie, most of these people commute to jobs outside of the Fort Laramie area.

3.2. Economic Projections

In order to understand and get a feel for the economics of the Fort Laramie community, it is important to analyze the income level demographics of the town. According to the GCEDC 2009 Community Profile for Fort Laramie, the income levels for the town are as follows:

- Median household income $22,500
- Median family income $32,917
- Per capita income $13,236
- Families below poverty level 18.9%
- Individuals below poverty level 20.5%
According to the November 2006 Housing Needs Assessment for Goshen County, Wyoming (as prepared by the GCEDC), the average household income for Goshen County is estimated at $32,228. As can be seen, the median household income for Fort Laramie is considerably lower (by about 30%). This is most likely due to the fact that there are no major employers based within the vicinity of the Town. Although the Platte Oil and Butte Oil companies have several oil storage tanks just east of town, each only employ 1 or 2 full time personnel to maintain these facilities. So they do not represent a significant workforce within the community.

As a result of the loss of employment opportunities when work at the Sunrise Mine and Gray Rocks Dam shut down in the early 1980s, and subsequent population decrease, the Town of Fort Laramie was no longer able to support a school system in their community. Therefore, school children from K through 12th grade in Fort Laramie now attended school in Lingle, Wyoming (about 10-miles east of Fort Laramie) for nearly 30-years. An active school system can add to the economic viability of a community, as well as promote community pride and spirit through there extracurricular activities. The loss of professional school teachers and administrators can have a noticeable effect on a community’s economy, particularly a community the size of Fort Laramie. With the loss of employment from the mine and Gray Rocks dam construction, along with the loss of the Fort Laramie schools, the work force and overall economic stability of the community was reduced as a result. These instances are major factors for below average household incomes seen in Fort Laramie as compared to the rest of the County.

Based on the stagnant growth in population since 1980, and the lack of a vibrant economy in Fort Laramie, the town will continue to remain in a net zero growth economy unless things change. To combat this lull in economic viability for the Town of Fort Laramie, the community needs to investigate other employment opportunities that will allow them to sustain and moderately grow their community.
Community development opportunities that will be further investigated in the study include, but not necessarily limited to, the following:

✓ Land Development opportunities to allow the community to grow within and beyond their current corporate limits.

✓ Discuss how utility infrastructure improvements can benefit the community by having up to date water and sewer facilities to attract businesses and industry.

✓ Street and Streetscape improvements to make the town more attractive and safe.

✓ Housing opportunities that can help attract potential employers to move into the area.

✓ Taking advantage of tourism and historical preservation opportunities that supplement the local economy.
4. LAND USE

4.1. Existing Land Use Characteristics

The Town of Fort Laramie is situated on approximately 156 acres of land, with about 95% of this land already developed. With 5% of the land within the corporate limits of Fort Laramie still undeveloped (about 8.1 acres), opportunity exists for new development without the need to acquire additional land for growth. Currently, the Town of Fort Laramie does not have any form of zoning ordinances on record, and so the Town does have some flexibility on how they may choose to develop their remaining properties.

4.2. Proposed Land Use Development Needs

As was discussed in Section II of this report, housing (especially rental housing) throughout Goshen County is of major concern, particularly with a substantial increase in the County Wide workforce for both Goshen and Platte Counties over the next five years. Housing units covering the entire spectrum of housing from single family detached homes to multi-family condominium and apartment housing units are needed. Because Fort Laramie is more centrally located to the areas of workforce growth within Goshen and Platte Counties (Torrington and Guernsey), the town would be an attractive option for people to move to if housing is available.

The Town of Fort Laramie’s main commercial district would be along North Laramie Avenue from U.S. Highway 26 north. Existing businesses located along North Laramie Avenue include convenience and novelty type shops, restaurant and bar establishments, and a motel to name just a few. An old mechanics shop located at the northwest corner of U.S. Highway 26 and North Laramie Street has just recently been torn down, making this lot available to potential commercial development in the future. Improving the
commercial business area of downtown Fort Laramie needs to be considered in order to provide a vibrant, active economic base for a community.

Industrial improvements in Town are minimal and consist of the oil storage tanks and facilities for Platte Oil and Butte Oil. According to the administrative staff for Butte Pipe Line, they employ only one full time employee at the Fort Laramie site. No other major industrial operations are provided for in Fort Laramie at this time.

4.3. Unincorporated Property Adjacent to Fort Laramie

The Town of Fort Laramie is surrounded mainly by agricultural farm land on the east, west and south boundaries of the community, with the Fort Laramie Irrigation Canal on the north. From a development perspective, much of the agricultural farm land that surrounds Fort Laramie could be used by the Town to expand its borders if these lands were to become available to purchase. These privately owned, unincorporated properties consist of about 127 acres, and based on their proximity to the corporate boundary of the community, appear to be logical areas for the Town to expand in the future. The unincorporated private properties identified as possible future development areas are shown on the exhibit provided on the following page. These properties have been identified as development areas A-1 through A-5, with no particular sequence or schedule as to which property is more important than the rest.

In analyzing these possible development areas, it would appear that those on the north side of U.S. Highway 26 would be better suited for residential use with some light commercial type development improvements. The natural topography for future development areas A-1 and A-5 tends to follow the same moderate increase in grade from U.S. Highway 26 north as the rest of the north side of town, and would allow for a higher lot density to be served. By developing the lots in these two areas, The Town would be able to assist in the housing shortfall that is anticipated over the next five to ten years.
FUTURE DEVELOPMENT LEGEND

Adjacent Land Purchases

SCALE: 1" = 1000'

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Development area A-2 would seem to lend itself more towards the commercial and/or industrial land uses, with the ground being more level. This would allow for larger lot sizes to be sectioned off for commercial or industrial uses, and potentially even allow for an industrial park to be developed as one possibility. Industrial businesses are already using land in this area with the Platte Pipeline Oil storage tanks located just to the east of development area identified as A-2. Development areas A-3 and A-4 would seem to lend themselves more towards commercial and residential uses as a result of their proximity to existing commercial and residential developments. The following table summarizes the possible unincorporated development areas adjacent to Fort Laramie, and indicates the relative size of the development area in acres, and what its potential uses might be.

**TABLE 4.1**

Possible Unincorporated Development Properties

<table>
<thead>
<tr>
<th>Development Area</th>
<th>Area (Acres)</th>
<th>Projected Land Use Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-1</td>
<td>28</td>
<td>Residential &amp; Light Commercial</td>
</tr>
<tr>
<td>A-2</td>
<td>41</td>
<td>Industrial/Commercial</td>
</tr>
<tr>
<td>A-3</td>
<td>20</td>
<td>Commercial &amp; Residential</td>
</tr>
<tr>
<td>A-4</td>
<td>16</td>
<td>Commercial &amp; Residential</td>
</tr>
<tr>
<td>A-5</td>
<td>22</td>
<td>Residential &amp; Light Commercial</td>
</tr>
</tbody>
</table>

It is important to note that the projected land use type as described in Table 4.1 above are suggestions only for the purposes of this study. As communities grow and develop, land uses can change based on what a community is able to capitalize on first, and where the best property is available for the initial uses. However, based on the current layout of the Town of Fort Laramie and the location of existing residential, commercial and industrial facilities, the above table tries to depict the realistic uses of the various potential unincorporated development properties surrounding Fort Laramie. It is also important to note that none of the property associated with the five possible development areas
indicated in Table 4.1 are currently for sale, and according to town staff, the prospect of purchasing any one of these areas (or a portion there of) in the near future is not good. However, it is important for a community to understand how they can grow if these areas do come up for sale, and how they need to plan for such a realization.

4.4. Development Improvement Costs

As with any improvement, the cost to develop or even to open a future area up for development can make or break the situation. Certainly, the need for the improvement has to be there to justify the expense of moving forward, whether the development improvement comes from within the Town limits or just outside. With respect to the Town of Fort Laramie, it would appear that they should initially look at existing land use development options within their own boundaries.

4.4.1. Infill Development

Presently, approximately 8.1 acres of property within the Town limits is currently undeveloped. However, not all of this undeveloped land is owned by the Town. There are several lots (mostly residential lots) that are owned by adjacent home owners. These home owners have purchased extra lots for the purpose of either creating one larger lot, or for investment purposes in the future. The property owned by the Town, or at least available for development, should be considered first and foremost for future land use development. The benefit of the town having properties developed within current corporate limits is that in most cases water, sewer, electrical and telecommunications are already available for those lots or are close enough so that it is easy to extend the service to vacant lots. Therefore, the main cost associated with developing an existing vacant lot is the cost of construction, which will vary depending upon the type and function of the structure being built. Reference the Town owned property map on the following page for
location information related to infill development areas within the corporate limits of Fort Laramie.

From a development perspective, it would appear the Town of Fort Laramie should first consider focusing on housing development for their community. With the State of Wyoming’s new Medium Security Correctional Institution opening in early 2010 and with the National Guard Camp in Guernsey looking to increase its permanent staffing substantially through year 2014, housing within Goshen and Platte Counties will become critical. Town owned lands available for development along North Laramie Street are probably more geared towards commercial type uses since most of the commercial businesses in Town are located along this main street. However, the Town owns a large tract of land on the southwest end of town that would be ideal for in-fill residential development, in particular, rental housing development. This location is close to a public park facility for kids to enjoy, and easy access to Highway 26, the main road through town.

Commercial development should also be pursued by the Town, as lots are available within the corporate limits to attract business enterprises. With the Historic Fort Laramie just 2.5 miles away, the Town of Fort Laramie has a unique opportunity to take advantage of tourism dollars, and expand upon this commercial opportunity. With the planned infrastructure improvements for North Laramie Street detailed in Section 5 of the study, the Town would have the opportunity to make North Laramie Street (the town Main Street) an attractive and accessible location to expand upon commercial tourism for the community. Not only would there be shops, restaurants, and possible historic museums to visit, but the Town has a public park along this route that would be a benefit to the community as well.
Legend

Town-Owned Property

SCALE: 1" = 600'
4.4.2. Private Land Development

Although much of the property surrounding the corporate limits of the Town is currently unavailable for purchase or development, the Town will need to understand the cost to develop this land if, in the future, they are able to incorporate portions into the town limits. For this discussion, five (5) separate areas bordering the corporate limits of Fort Laramie have been identified as potential areas of development. These potential development areas have been identified as areas A-1, A-2, A-3, A-4, and A-5. Development areas A-1, A-3, A-4 and A-5 are considered to be developments zoned for more typical residential and/or light commercial activities. The cost to provide the back bone utility and road system improvements can be estimated based on the cost to develop an average town block. For the Town of Fort Laramie, the average size of a Town block is approximately 2.5 acres. With that in mind, the development areas A-1, A-3, A-4 and A-5 can be broken down into the number of typical town lots as shown in the following table:

<table>
<thead>
<tr>
<th>Development Area</th>
<th>Area (Acres)</th>
<th>Number of Blocks</th>
<th>Anticipated Number of Lots</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-1</td>
<td>28</td>
<td>11</td>
<td>264</td>
</tr>
<tr>
<td>A-3</td>
<td>20</td>
<td>8</td>
<td>192</td>
</tr>
<tr>
<td>A-4</td>
<td>16</td>
<td>6</td>
<td>144</td>
</tr>
<tr>
<td>A-5</td>
<td>22</td>
<td>9</td>
<td>216</td>
</tr>
</tbody>
</table>

Knowing the number of typical town blocks, we can estimate development costs for areas A-1 and A-3 through A-5 based on the average cost to provide water, sewer, electrical, telecommunications, and road system improvements.
For an average town block in Fort Laramie, the average cost to provide water, sewer, electrical, telecommunications, and street improvements are summarized as follows:

✓ Average Cost per Block for Sewer with Services: $52,000
✓ Average Cost per Block for Water with Services: $64,000
✓ Average Cost per Block for Electrical with Service Runs: $20,000
✓ Average Cost per Block for Phone Service: $10,000
✓ Average Cost per Block for Street Improvements: $130,000
✓ Average Cost per Block for Drainage Improvements: $60,000
✓ Average Cost per Block for Engineering Fees: $34,000
✓ Average Cost per Block for Development Fees: $5,000
✓ Total Average Development Cost per Block of Improvement: $375,000

Based on this average cost per block for residential and light commercial development at $375,000 the estimated cost to develop the areas A-1 and A-3 through A-5 are given in the following Table:

Table 4.3
Private Land Development Costs

<table>
<thead>
<tr>
<th>Development Area</th>
<th>Number of Blocks</th>
<th>Cost per Block</th>
<th>Total Development Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-1</td>
<td>11</td>
<td>$375,000</td>
<td>$4,125,000</td>
</tr>
<tr>
<td>A-3</td>
<td>8</td>
<td>$375,000</td>
<td>$3,000,000</td>
</tr>
<tr>
<td>A-4</td>
<td>6</td>
<td>$375,000</td>
<td>$2,250,000</td>
</tr>
<tr>
<td>A-5</td>
<td>9</td>
<td>$375,000</td>
<td>$3,375,000</td>
</tr>
</tbody>
</table>

It is important to note that the costs provided in the above Table 4.3 are for estimating purposes only, and they should not be construed to be the actual development costs for these representative development areas. Cost spreadsheets for water, sewer, street and drainage improvements are provided in Appendix B of this study.
From an industrial development perspective, development area A-2 could be developed at any time if the property were to become available and if a suitable industry or combination of industries were willing to come to Fort Laramie. The average cost per acre to develop an industrial park located in a low lying accessible area can be very widely, depending upon the type of industrial activities to be expected throughout the park, and the configuration of the lots on the park. For Fort Laramie, development area A-2 is close to the town’s existing infrastructure improvements, and therefore it would not be difficult to extend these services to this area. Industrial sized lots are; of course, much larger than typical residential and small commercial lots, and therefore, the service point density for an industrial park is generally substantially less than a residential development. Also, industrial park developments for the Fort Laramie area would not require a paved road system. Gravel roads would be more than adequate, and storm drainage can be managed with earthen swales and culverts. Based on these assumptions, the following costs per acre for development of an industrial park are estimated:

<table>
<thead>
<tr>
<th>Service</th>
<th>Average Cost per Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewer Service</td>
<td>$19,150</td>
</tr>
<tr>
<td>Water Service</td>
<td>$18,150</td>
</tr>
<tr>
<td>Electrical Service</td>
<td>$12,000</td>
</tr>
<tr>
<td>Phone Service</td>
<td>$7,000</td>
</tr>
<tr>
<td>Street Improvements</td>
<td>$21,000</td>
</tr>
<tr>
<td>Drainage Improvements</td>
<td>$500</td>
</tr>
<tr>
<td>Development Fees</td>
<td>$2,500</td>
</tr>
<tr>
<td><strong>Total Average Development Cost per Acre</strong></td>
<td><strong>$80,300</strong></td>
</tr>
</tbody>
</table>

Based on the above estimated costs per acre to develop an industrial park near Fort Laramie, the estimated cost to develop area A-2 (encompassing 42 acres) as an industrial park is about $3,292,300 (including engineering fees). Again, it needs to be understood that these costs are not based on any particular lot size or development lot configuration. Actual costs could be more or less if an actual lot layout is developed.
From a planning perspective, it seems reasonable to split the 47 acres within development area A-2 into lots ranging in size from 2 acres to as large as 5 or 7 acres on average. This will allow for multiple industrial and or large commercial businesses to move to the area. As a development goal, if the Town is able to develop area A-2 into an industrial park at some point in the future, they should set for themselves a goal for the number of businesses to bring into the park over a 20-year period. A conservative goal to achieve for the Town over a 20-year period would seem to be in the range of 5 to 7 industrial or large commercial businesses to be developed within planning area A-2.

If an industrial park facility is to be realized in Fort Laramie, then they will need to understand their funding source options to develop this park. Funding sources such as the State Lands and Investment Board (SLIB), USDA Rural Development (USDA:RD), the BRC and the EDA are just a few of the typical funding sources available to the Town to assist in developing an industrial park in their community.
5. PUBLIC FACILITIES, EMERGENCY SERVICES AND INFRASTRUCTURE

One of the aspects of a community that can be very important in attracting people to move to or to visit is the quality and availability of recreational facilities. Families like to know they have recreational alternatives available to them so they do not have to be confined to their local residence. Parks, community centers, libraries, swimming pools and historical points of interest (like Historic Fort Laramie), are all good amenities that attract visitors to their area, as well as help encourage people to move to a community.

Fort Laramie currently has two public park facilities within its corporate limits. One of the parks is located south of U.S. highway 26 (south park), and is bordered on the north by Park Road and on the east by Laramie Avenue. This park consists of picnic benches, swing set(s), trees, and a men’s and women’s public restroom facility. The park is about the size of one city block and is adjacent to undeveloped property to the south. Overnight camping is allowed at this park therefore, the park does experience a large amount of activity during the Spring and Summer months.

A second park is located on the north end of Town (north park), and is bordered on the north by Otis Street and on the east by Laramie Avenue. Like the south park, the north park consists of picnic benches, swing set(s), trees, and a men’s and women’s public restroom facility. The park is about the size of a City Block, and tennis courts are located directly west of the park site. Overnight camping is not allowed at the north park, as a consequence, this park sees a reduced amount of activity during the Spring and Summer time of the year. Activity at the north park is mostly limited to local youth who come to play or families looking to have a picnic lunch.
5.1. Parks and Recreation Improvements:

Although both the North and South Parks receive activity during the year, both can be improved to provide a better experience for visitors and the general public. The existing public restroom facilities at both community parks are in very poor condition, and do not meet current ADA standards for public restrooms. Insufficient plumbing, improper ventilation, and inadequate space are just some of the issues the public has to contend with when they use these facilities (reference the photographs provided below).

Baker & Associates, Inc. has completed a preliminary review of both the North and South Park public restroom facilities in Fort Laramie, and we have developed a preliminary floor plan that can be used to address the ADA accessibility issues associated with both of the restroom facilities. Both the North and South restroom facilities were constructed and based off of the same building floor plan. In the existing restrooms for both the men and women, there is only one toilet and one sink available, and the sinks only have a cold water faucet. Paper towel dispensers are not available, and facility heating is not provided for. Therefore, the restrooms would only be usable during the spring, summer or early fall times of the year.

The ADA compliant public restroom facilities proposed by Baker & Associates, Inc. would allow for at least two stalls within the women’s restroom with two wash sinks, both hot and cold running water, ventilation and electric heating. The men’s side of the restroom would consist of a handicap accessible stall, a urinal, two wash bay sinks with hot and cold running water, paper towel dispensers, ventilation and electric heat. The
walls of the structure would be painted masonry block or block with integral color with an asphalt shingled roof. This proposed public restroom facility will be capable of providing easy access to the general public with the ability to be available throughout the entire year. A preliminary floor plan for a new ADA accessible restroom facility has been provided in Appendix D of this report.

Another way to improve upon the two existing park facilities within Fort Laramie is to provide some additional amenities in hopes of increasing the level of enjoyment for visitors and the general public. During discussions with the public at the February 25, 2010 public hearing, it was mentioned that the existing concrete table benches should be replaced as well as increasing the number of concrete table benches at the parks. In addition to this amenity improvement, it was mentioned that new awnings should also be considered for all of the concrete table benches. The awnings are important because they provide necessary shade during the hot summer days as well as weather protection during storm events. People are more apt to visit the parks and spend several hours there if they know they will be able to have protection from the weather if need be.

Other amenities that should be considered at the two public parks to increase public use and enjoyment would be to provide more of the typical park and recreation equipment such as jungle gym type structures, swing sets, more and improved basketball hoop(s...
and/or tennis court type areas to name just a few. If the good quality amenities are available to the general public, and they are well kept, the community will see an increased level of activity at these important public use facilities. The spreadsheet provided on the following page indicates budgetary costs for the proposed public park amenities discussed in this section. Where possible, specific amenities are identified for each of the two public parks (North Park and South Park), with a total cost summary for each. For budgetary purposes, we have included engineering fees at 15% of total construction cost with an additional 10% for contingencies.

*Park Amenities at the North Park in Fort Laramie*
<table>
<thead>
<tr>
<th>Item #</th>
<th>Description</th>
<th>Units</th>
<th>Quantity</th>
<th>Unit Price</th>
<th>Item Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Municipal Park Construction Improvement Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Picnic Areas (North &amp; South Parks - 2 Each)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Concrete Picnic Tables</td>
<td>EA</td>
<td>4</td>
<td>$1,000.00</td>
<td>$4,000</td>
</tr>
<tr>
<td>2</td>
<td>Concrete Picnic Benches</td>
<td>EA</td>
<td>8</td>
<td>$600.00</td>
<td>$4,800</td>
</tr>
<tr>
<td>3</td>
<td>Picnic Table Awnings</td>
<td>EA</td>
<td>4</td>
<td>$5,500.00</td>
<td>$22,000</td>
</tr>
<tr>
<td>4</td>
<td>Lighting</td>
<td>EA</td>
<td>4</td>
<td>$5,000.00</td>
<td>$20,000</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal construction cost</strong></td>
<td></td>
<td></td>
<td></td>
<td>$50,800</td>
</tr>
<tr>
<td></td>
<td>Contingency (10%)</td>
<td></td>
<td></td>
<td></td>
<td>$5,080</td>
</tr>
<tr>
<td></td>
<td>Engineering (15%)</td>
<td></td>
<td></td>
<td></td>
<td>$7,620</td>
</tr>
<tr>
<td></td>
<td><strong>Total project cost</strong></td>
<td></td>
<td></td>
<td></td>
<td>$63,500</td>
</tr>
<tr>
<td></td>
<td><strong>Play Ground Equipment (North &amp; South Parks)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Swing Sets (North Park)</td>
<td>EA</td>
<td>1</td>
<td>$3,000.00</td>
<td>$3,000</td>
</tr>
<tr>
<td>2</td>
<td>Jungle Gym Equipment (South Park)</td>
<td>EA</td>
<td>1</td>
<td>$75,000.00</td>
<td>$75,000</td>
</tr>
<tr>
<td>3</td>
<td>Slides (North Park)</td>
<td>EA</td>
<td>1</td>
<td>$15,000.00</td>
<td>$15,000</td>
</tr>
<tr>
<td>4</td>
<td>Merry-Go-Round (North &amp; South Parks)</td>
<td>EA</td>
<td>2</td>
<td>$10,000.00</td>
<td>$20,000</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal construction cost</strong></td>
<td></td>
<td></td>
<td></td>
<td>$113,000</td>
</tr>
<tr>
<td></td>
<td>Contingency (10%)</td>
<td></td>
<td></td>
<td></td>
<td>$11,300</td>
</tr>
<tr>
<td></td>
<td>Engineering (15%)</td>
<td></td>
<td></td>
<td></td>
<td>$16,950</td>
</tr>
<tr>
<td></td>
<td><strong>Total project cost</strong></td>
<td></td>
<td></td>
<td></td>
<td>$141,250</td>
</tr>
<tr>
<td></td>
<td><strong>Basketball Courts (South Park)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Basketball Hoops</td>
<td>EA</td>
<td>2</td>
<td>$4,000.00</td>
<td>$8,000</td>
</tr>
<tr>
<td>2</td>
<td>Concrete Playing Surface</td>
<td>SY</td>
<td>500</td>
<td>$60.00</td>
<td>$30,000</td>
</tr>
<tr>
<td>3</td>
<td>Lighting</td>
<td>EA</td>
<td>4</td>
<td>$5,000.00</td>
<td>$20,000</td>
</tr>
<tr>
<td>4</td>
<td>Water fountain</td>
<td>EA</td>
<td>1</td>
<td>$2,500.00</td>
<td>$2,500</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>SY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal construction cost</strong></td>
<td></td>
<td></td>
<td></td>
<td>$60,500</td>
</tr>
<tr>
<td></td>
<td>Contingency (10%)</td>
<td></td>
<td></td>
<td></td>
<td>$6,050</td>
</tr>
<tr>
<td></td>
<td>Engineering (15%)</td>
<td></td>
<td></td>
<td></td>
<td>$9,075</td>
</tr>
<tr>
<td></td>
<td><strong>Total project cost</strong></td>
<td></td>
<td></td>
<td></td>
<td>$75,625</td>
</tr>
</tbody>
</table>
### Municipal Park Construction Improvement Costs

#### Tennis Courts (North Park)

<table>
<thead>
<tr>
<th>Item #</th>
<th>Description</th>
<th>Units</th>
<th>Quantity</th>
<th>Unit Price</th>
<th>Item Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Demo existing Tennis Courts</td>
<td>LS</td>
<td>1</td>
<td>$15,000.00</td>
<td>$15,000</td>
</tr>
<tr>
<td>2</td>
<td>Tennis Court Surfacing</td>
<td>SY</td>
<td>120</td>
<td>$700.00</td>
<td>$84,000</td>
</tr>
<tr>
<td>3</td>
<td>Tennis Court Netting</td>
<td>EA</td>
<td>1</td>
<td>$5,000.00</td>
<td>$5,000</td>
</tr>
<tr>
<td>4</td>
<td>Tennis Court Fencing</td>
<td>LF</td>
<td>320</td>
<td>$40.00</td>
<td>$12,800</td>
</tr>
<tr>
<td>5</td>
<td>Lighting</td>
<td>EA</td>
<td>4</td>
<td>$5,000.00</td>
<td>$20,000</td>
</tr>
<tr>
<td>6</td>
<td>Water Fountain</td>
<td>EA</td>
<td>1</td>
<td>$2,500.00</td>
<td>$2,500</td>
</tr>
</tbody>
</table>

**Subtotal construction cost**: $139,300

- **Contingency (10%)**: $13,930
- **Engineering (15%)**: $20,895

**Total project cost**: $174,125

---

Engineer’s opinions of probable Construction Cost are to be made on the basis of Engineer’s experience and qualifications and represent Engineer’s best judgment as an experienced and qualified professional generally familiar with the construction industry. However, since Engineer has no control over the cost of labor, materials, equipment, or services furnished by others, or over contractors’ methods of determining prices, or over competitive bidding or market conditions, Engineer cannot and does not guarantee that proposals, bids, or actual Construction Cost will not vary from opinions of probable Construction Cost prepared by Engineer. If Owner wishes greater assurance as to probable Construction Cost, Owner shall employ an independent cost estimator.
5.2. Open Space Improvements:

No open space areas within and surrounding the Town of Fort Laramie have been developed. Open space areas are areas where dwelling units have been concentrated in one area, thereby reserving undeveloped areas elsewhere. With the minimal amount of space remaining to be developed within the corporate limits of Fort Laramie, open space development within town probably is not a viable option. However, there are several areas of possible future private developable lands outside of the corporate limits of Fort Laramie that can be developed with open space design techniques in mind. These possible future land development areas were identified previously in Section 4.

Open space development seeks to minimize lot sizes, set backs, and frontage distances to allow for open space areas, areas that are basically undisturbed to preserve the native land. Open space areas preserved in their natural condition require little maintenance, and these areas help to reduce and sometimes treat storm water runoff from the development. Advantages of open space development include the following:

✓ Reduced impervious cover in a development.
✓ Reduced pollutant loads to streams and other water resources.
✓ Reduced potential pressure to encroach on resource buffer areas.
✓ Reduced soil erosion potential by reducing the amount of clearing and grading on the site.
✓ Preservation of green space.
✓ Preservation open space for recreation.
✓ Lower capital cost of development.
✓ Lower storm water management costs by concentration of runoff in one area and reducing runoff volumes.
✓ A wider range of feasible sites to locate storm water BMPs.
✓ Lower costs of future public services needed by the development.
Possible increase in property values.

Creation of urban wildlife habitat “islands”.

Support other community planning goals, such as pedestrian movement, neighborhood enhancement, farmland preservation, affordable housing, and architectural diversity.

By employing open space techniques, the amount of impervious surfaces (such as concrete or asphalt pavement) can be reduced by 10 to 50%, and the amount of clearing and grubbing can be reduced between 35 to 60%. This can significantly reduce the cost of development in some instances, while at the same time preserving the natural habitat of the area. Although open space development does not seem to be a realistic venture in the near future, because outlying developable areas are not yet available to the community or developers, this design concept should at least be considered if and when the opportunity to develop beyond the Town’s borders occurs.

5.3. Community Emergency Services:

In addition to the public recreational facilities that communities provide (such as parks and open space areas) for their residents to address quality of life needs, there are also basic safety and emergency response needs that communities need to provide to insure the overall safety and well being of the people. Law Enforcement, Emergency Medical Treatment (EMT) personnel, and Volunteer Fire Departments are important necessary public services that help aid in providing a well rounded community because they provide a needed level of safety and feeling of comfort to those living or visiting the community. These services, in some form or fashion, are provided to the residents of Fort Laramie, and each of these public safety services will be further discussed to determine if more can be done to improve their effectiveness within the community.
5.3.1. Volunteer Fire Department:

The Volunteer Fire Department (VFD) for the Town of Fort Laramie is located at 100 Firehouse Road, and it consists of 17 volunteers, 2 fire trucks, and a couple small support vehicles. Currently, the Fort Laramie VFD appears to be equipped with the necessary equipment needed for them to adequately perform their jobs, and they have been successful in recent years in securing grant monies for the purpose of purchasing equipment. The annual budget for the VFD has been set at $20,000, and the budget for this department is basically fixed.

On a yearly basis, the Fort Laramie VFD responds to about 10 calls on average. Many of these calls are in response to fire or other emergencies within a 10 to 20 mile radius of the Town, and often times they assist other local and/or County fire response personnel. Although the VFD appears to be in good shape with regard to the equipment they use, it is important that the type and quality of equipment stay current also. Therefore, the Town of Fort Laramie and the VFD should continue to be aggressive with applying for grant monies and setting aside funds for future equipment purchases. This will help the town maintain a strong VFD, and allow the department to increase their level of service to the residents of Fort Laramie.

5.3.2. Law Enforcement – Local Police Department:

The local Police Department (PD) for the Town of Fort Laramie is located in the Town Hall at North Laramie Avenue and Otis Street, and it consists of one law enforcement personnel (the Chief of Police). No other police officers are employed for the Town of Fort Laramie and any other administrative staff would be supplied by the local town government. The local PD has 1 patrol car that is equipped with the necessary radios and law enforcement equipment and protective features necessary to transport suspects to and
The annual budget for the Fort Laramie PD has been set at $7,500, and the budget for this department is basically fixed.

On a yearly basis, the Fort Laramie PD responds to about 48 calls on average. Many of these calls are in response to misdemeanor type activities and they can provide assistance to other local and/or county law enforcement personnel. In discussions with local PD personnel, their most immediate needs revolve around acquiring a winter vehicle to allow them to have better response time during the time of year when snow can hamper their ability to get around town. It is estimated that the cost of a new winter police department vehicle would be in the neighborhood of $40,000 to $60,000. By acquiring this equipment, they will be better able to serve the general public and increase their level of service and security to the residents of Fort Laramie. The police department should begin looking into funding alternatives for the purchase of this vehicle through the various State and Federal funding sources that will be described in more detail in Section 8 of this document. With the uncertainty in the economy at this time, the sooner monies can be petitioned for, the sooner this vehicle can be purchased.

5.3.3. Emergency Medical Services:

The Town of Fort Laramie does provide for emergency medical services in the form of a local EMT service capable of providing emergency medical care to the local population. The Local EMT is located directly adjacent to the Fire Station at 100 Firehouse Road, and it consists of 10 trained EMT personnel and an emergency response vehicle (ambulance). Currently, the Fort Laramie EMT is sufficiently equipped with the necessary personnel and equipment needed for them to adequately perform their jobs. The annual budget for the Fort Laramie EMT is tied to the Volunteer Fire Department budget, which would be a portion of the overall $20,000 as identified above.
On a yearly basis, the Fort Laramie EMT responds to about 48 calls on average. Many of these calls are in response to a wide range of medical emergencies and often times they assist other local and/or county emergency medical service responders. Although the local EMT service appears to be in good shape with regard to the equipment they use, it is important that they stay current with the type and quality of equipment they need. Therefore, they should work with the Town staff to apply for emergency equipment funding on a regular basis. Grant and loan monies are available to be used for equipment purchases and often times it come down to a first come, first serve basis. The local EMT service should continue to seek additional funds on an annual basis to help in financing future upgrades to their equipment and personnel training so they can provide the best possible service to the residents of Fort Laramie.
5.4. Current Water System

Much like the parks and recreation, the utility infrastructure for the Town of Fort Laramie (which includes the water, sewer, surface water, and street systems) is an extremely vital component of a community’s image. These utilities should be viewed as services provided by the Town of Fort Laramie to its residents. If the Town provides the best services possible, it can greatly affect the overall quality of life for their residents.

Providing adequate services also goes a long way in attracting potential newcomers. For example, people will not relocate to a Town where they can’t be guaranteed safe drinking water or where there is a possibility of the sewer system failing, etc. That being said, Fort Laramie is sorely behind in maintaining and improving their infrastructure.

The Town of Fort Laramie’s existing water system has many areas of concern. The first area of concern is the age and type of pipe currently in service for the conveyance of water. The original water supply system was constructed in the 1950s, with significant upgrades to the water system completed in 1962 when approximately 12,000 lineal feet (lf) of 4” and 6” asbestos cement (AC) pipe was installed. The Town’s existing 50,000-gallon storage tank was constructed at this time as well. AVI Professional Corporation has completed a Water Supply Rehabilitation Level II Study for the Town of Fort Laramie in collaboration with the Wyoming Water Development Commission in June of 2008, and within that study they estimate that the current system consists of approximately 730 lf of 8” PVC, 3,000 lf of 6” PVC, 13,800 lf of 6” AC transmission mains, and 6,000 lf of 4” or smaller AC distribution piping.

The Town has three domestic wells total. However, only two of the wells are used within the Town’s current water system. Fort Laramie #1 was installed in 1949; the well was drilled with a 24” borehole and was cased with galvanized steel. This well’s production capacity is estimated at 600 gallons per minute (gpm). Fort Laramie #2 was drilled in
1967. This well has 16” steel casing and a production capacity of about 2,000 gpm. Both well pumps for wells 1 & 2 were replaced by Sargent Drilling around June of 2008. The pumps were replaced with submersible three stage Goulds pumps with 6” diameter discharges. The pump motors are now 30 HP three-phase Franklin motors. Flow tests conducted after the well upgrades obtained yields between 530 and 590 gpm. Fort Laramie #3 was drilled in June of 1980. It is constructed of 5” PVC casing and according to records the well was metered for a three-month period, producing an average of 2 gpm. The well is powered by a wind mill and as stated above is not included within the Town’s supply system.

The Town currently uses a 50,000 gallon storage tank constructed in 1962. This tank sits on private property located approximately one half mile north of the wells and just east of North Laramie Avenue. The tanks dimensions are listed on a plaque located on the exterior of the tank. The plaque states the tank is 20’ OD, and 21’6” in height. The Level II study confirms the dimensions as stated on the plaque. According to the Fort Laramie Quadrangle, USGS 7.5-Minute Topographic map the tank foundation elevation is around 4,350 feet above MSL. The tank level is controlled by the Town’s Supervisory Control and Data Acquisition (SCADA) system. Well pumps turn on when the tank level drops to 15.2’ or approximately 36,177 gallons. The well pumps are then turned off when the tank level reaches 19.2’ or approximately 45,698 gallons. The Town currently has a contract with McGuire Iron of Sioux Falls South Dakota to service the tank on a three-year rotation. McGuire Iron also erected the tank originally. The tank was refurbished inside and out in March of 2008, and according to the Level II study the tank is in excellent condition. However, the tank is currently at the root of many of the Town’s water system deficiencies that will be further addressed below.

Within the study conducted by AVI Professional Corporation they discuss the many system deficiencies the Fort Laramie water system currently encompasses. The deficiencies are quickly summarized as: inadequate storage capacity, insufficient pipe
sizing, lack of dedicated transmission main between the production wells and the storage
tank, poor conditions of existing pipelines, inadequate system pressures, lack of record
keeping, and issues with current easement for the storage tank and transmission main.

5.5. Water System Implementation and Recommendations

5.5.1. Water Storage Tank

As stated previously, the Town’s current water storage tank encompasses many of the
deficiencies identified in AVI’s Level II study. The deficiencies will be briefly described
here as they are covered in great detail within the Level II study. This plan will weigh
more heavily on what action will be taken by the Town to address these issues. The
elevated tank is located on private property with easements for the tank and pipeline. As
a condition of this easement the Town agreed to furnish the grantors water free of charge
for the life of the easement. The Town indicated that this stipulation is a major concern
as the grantors use large amounts of water for which the Town cannot bill for. Also the
relationship between the landowner and the town is contentious at best. For example, the
Town attempted to install a fence around the tank recently for security purposes, but the
landowner abruptly denied the Town’s request.

The Town currently only has one waterline that conveys water from the wells to the tank
and from the tank back to the distribution system. The Town is prevented from total EPA
compliance from a disinfection protocol with this single waterline. The easiest solution is
to add another waterline creating a dedicated transmission main to the tank, but the Town
is constrained by the easement once again. It is unlikely the landowner will grant another
easement to allow the Town to construct a second waterline to the tank. To go one step
further, the Town would be ill advised to complete this even if the landowner agreed to
the easement based on the current issues they have with the landowner. Another issue
identified with the single waterline to the tank is that there is currently a portion of the
waterline that is not included within the easement. This portion encroaches on another private landowner different from the current easement grantor. If the tank remains at its current location the Town will be required to upgrade the current waterline as well as construct a second waterline for the purpose of a dedicated transmission main.

The other major issue that currently plagues the existing water storage tank is inadequate system pressures and flows as well as inadequate storage capacity. The Level II study indicates that system pressures and flows do not meet fire flow standards. In most cases, the flows are less than half of the recommended level. In addition to fire flow standards not being adequately met, the Town regularly receives complaints about low pressure at many points of use. These issues result from head loss due to undersized transmission and distribution mains, dead end lines, and inadequate elevation of the Town’s storage tank. The storage capacity is discussed in great detail within the Level II study. The Wyoming Department of Environmental Quality worked with AVI during the Level II study and came to the conclusion that the Town needed 150,000 gallons of storage. This number was a result of a reasonable compromise between the fire flow requirements and at the same time avoiding water quality issues associated with storage in excess of five to six days of demand.

The Level II study gives multiple options to the Town of Fort Laramie regarding their water storage tank. After multiple discussions with the Town about the current issues and options available, they are interested in pursuing one of the options discussed above. Rather than do anything with the tank at its current location, due to the numerous challenges mentioned previously, the Town will move forward under the premise that they will decommission the existing tank and erect a 150,000 gallon elevated water storage tank on Town owned property located directly across the street from the production wells, please reference the Water System Improvements map in Appendix D for the proposed elevated tank location. This option frees the Town from having to replace the current 2,800 lineal feet of transmission main between the wells and tank, as
well as constructing a second main of equal length to create a dedicated transmission main. At today’s costs that savings is estimated at $175,000. In addition, this change will reduce the amount of waterline that must be maintained by the Town of Fort Laramie. The estimated costs and proposed schedule for these improvements will be detailed below.

This proposed change will eliminate many of the current system deficiencies previously identified. The one thing that must be understood, however, is that the condition of the piping within the current water system is unknown as evaluation of line integrity is not included within the scope of this plan. However, as mentioned previously, the majority of the water system, approximately 85%, is comprised of AC waterlines installed in 1962, with a fair portion of the remaining 15% of the waterlines installed before 1962. Therefore, one can conclude that the integrity of these waterlines is dismal at best. That being said, if the proposed tank upgrades described above take place before the replacement of the aged waterlines, the Town will need to install a pressure-reducing valve (PRV) on the distribution system. The PRV will have to keep the system pressure at the present level until the aged pipelines are fully replaced unless the condition of the existing waterlines can be determined and the waterline’s capacity to withstand the increased pressure is verified. The Town will pursue the replacement of all their waterlines, but this process will take many years.

5.5.2. Waterlines

With the proposed tank change the Town will have effectively dealt with many of the deficiencies noted on AVI’s Level II study as referenced above. The Town’s water system deficiencies now comprise of: insufficient pipe sizing, poor conditions of existing pipelines, inadequate system pressures, and lack of record keeping. The proposed elevated tank will go a long way to resolve the inadequacies in system pressures, but not before the issue of insufficient pipe sizing is also dealt with. The Town of Fort Laramie’s
current waterline network is very old and desperately needs upgraded to adequately address the deficiencies noted within the Level II study. It should be stated that the Town needs to replace, and will pursue the replacement of, all of their buried waterlines with adequately sized PVC pipe except for the waterlines that were installed as part of the 2003 system improvements project and what will be abandoned with system upgrades. Please reference the waterline improvements spreadsheet detailed on a per block basis located in Appendix B as well as the Water System Improvements map located in Appendix D. In addition to the appendices please reference the following proposed improvement schedule to determine when the aged waterlines should be replaced.

In addition to replacing old waterlines, the Town also expressed interest in extending water service to the oil tanks on the east side of town. Fort Laramie stated that they would like to have waterlines along with fire hydrants extended to these locations for fire suppression at these sites. It must be stated however that the fire suppression will be limited to grass fires and structures not containing oil. Should there be a fire event involving oil or the oil tanks, water will not be effective in extinguishing the fire. Please reference the Water System Improvements map located in Appendix D for the location of the proposed upgrades. In addition, please reference the following proposed improvement schedule to determine when the upgrades will transpire as well as costs associated with the addition of waterlines. As previously stated, the Town reserves the right to modify the proposed schedule to address immediate concerns as they are presented or as the Town deems appropriate.

5.5.3. Record Keeping

Once the Town has addressed the aged waterline concerns, there is only one system deficiency remaining, the lack of record keeping. As part of the 2003 improvements a billing software system was purchased from Black Mountain Software in an effort to better manage the Town’s billing and record keeping. Even with the new billing
software, the Town experienced several issues in trying to accurately represent water usage versus water produced. At the time of this plan, the Town was still in the process of collecting and reporting 12 consecutive months of complete water data. Once this data is compiled it will be beneficial in determining water loss due to poor waterline conditions. The Town will work to replace all the aged waterlines regardless of significant leakage, but the data will be beneficial in determining an appropriate improvement schedule as the Town should replace waterlines with significant leakage first. Therefore, should the data show significant water loss through leaks in water mains and/or valves and fittings, the Town should proceed with leak detection services to pinpoint the problem areas and adjust the proposed improvement schedule accordingly.

5.5.4. Production Wells

The Town has also mentioned a possible concern with their current production wells. The Town maintains that there is a small pin-hole leak within the housing of the discharge head on the Fort Laramie #2 well. This leak should be evaluated and possibly alleviated before it becomes an issue. We would also recommend that while Fort Laramie #2 is being assessed by a service professional that Fort Laramie #1 also be evaluated and if issues requiring repair are identified the Town should add the repairs to the proposed improvement schedule. We are currently not recommending any upgrades to the production wells due to the fact that the pumps and motors were recently replaced and the Level II study indicates that the wells can accommodate a substantial increase in demand and corresponding population increase of several hundred people. There are currently no population projections that would indicate the demand will increase significantly in the foreseeable future.

The Town also faces another possible dilemma with their wells in the future. Within the Level II study AVI points out an alarming trend in the rise of nitrate levels at the Town’s production wells. In late 2004 nitrate levels were reported at 2.4 parts per million (ppm)
and in early 2007 nitrate levels had jumped all the way up to 4.8 ppm. The Maximum
Contaminant Level (MCL) for nitrates in the State of Wyoming is 10 ppm. While the
Town is currently well under the MCL, based on this trend, the Town can expect to reach
10 ppm within the next four to five years. Once the Town is above the MCL for nitrates
they will have to explore new source development or water treatment options. The City
of Torrington located approximately 20 miles downstream of Fort Laramie has already
been forced to install a very expensive water treatment facility because of their nitrate
situation. Fort Laramie pulls ground water from the same North Platte River alluvium as
Torrington. The Town has not given this concern much thought, but one option for the
Town would be point of use treatment.

In our research and experience, point of use is only viable for a public water source when
the target population is small enough to control and monitor all of the locations where
equipment is installed and used. Fort Laramie probably falls into this category. Point of
use equipment is typically a small R.O. filter unit which will fit in a cabinet or under a
sink. These units treat one incoming line of water usually up to 0.5 – 1.0 gallons per
minute. These units can reduce the nitrate concentration to a non-detectable level or a
level far below the MCL of 10 ppm.

This plan would include the installation of similar equipment at all points of use (whether
for residential homes, commercial or industrial uses) within the Town’s distribution
system that require safe potable drinking water, and also a maintenance program to
ensure the equipment is used properly and maintained on a regular basis. The point of
use equipment would be installed at the Town’s expense, and would include, but is not
limited to, changing filters on a regular basis and monitoring indicator lights to determine
when the equipment is not working properly. While many discount stores and hardware
stores sell under sink R.O. units at a reduced cost, for a public water supply such as this,
the equipment must be suitable for this purpose and reliable enough to be approved by
the Wyoming DEQ and/or the EPA for public water use. Additionally the units need to
have a notification alarm or light which will alert the user when the filter needs to be changed or when the equipment is not working properly. These issues will be challenges that must be addressed in the design process before implementation of the plan. However, a point of use treatment plan has been instituted in Broadwater, Nebraska (a community of about 130 people) and has worked well for them.

5.5.5. Proposed Water Improvement Schedule

Appropriate inflation factors (5%) have been applied so that the estimated project costs are representative of the projected date of construction. For every year beyond the projected date of construction an inflation factor of at least 5% should be added to the estimated project costs. Please reference Table 5.1 on the following page for the proposed water improvement schedule:
<table>
<thead>
<tr>
<th>Priority</th>
<th>Project Description</th>
<th>Project Location</th>
<th>Projected Date of Construction</th>
<th>Estimated Project Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Replace ex. 6&quot; AC waterline with 8&quot; PVC</td>
<td>Miles Avenue (North Corporate Limit to State Street)</td>
<td>May 2011</td>
<td>$199,873</td>
</tr>
<tr>
<td>2A</td>
<td>Replace ex. 4&quot; AC waterline with 8&quot; PVC</td>
<td>Fifth Addition (Laramie Avenue to Miles Avenue)</td>
<td>May 2012</td>
<td>$308,463</td>
</tr>
<tr>
<td>2B</td>
<td>Replace ex. 6&quot; AC waterline with 8&quot; PVC</td>
<td>Brooke Avenue (Otis Street to Merriam Street)</td>
<td>May 2012</td>
<td>$127,790</td>
</tr>
<tr>
<td>3</td>
<td>Replace ex. 4&quot; &amp; 6&quot; AC waterlines with 8&quot; PVC</td>
<td>Lawton Avenue (North Corporate Limit to State Street)</td>
<td>May 2013</td>
<td>$222,818</td>
</tr>
<tr>
<td>4</td>
<td>Replace ex. 4&quot; &amp; 6&quot; AC waterlines with 8&quot; PVC</td>
<td>Frontier Addition &amp; Fifth Addition to Laramie Avenue</td>
<td>May 2014</td>
<td>$242,918</td>
</tr>
<tr>
<td>5</td>
<td>Replace ex. 6&quot; AC waterline with 8&quot; PVC</td>
<td>Laramie Avenue (Gregg Addition to State Street)</td>
<td>May 2015</td>
<td>$497,632</td>
</tr>
<tr>
<td>6</td>
<td>Replace ex. 4&quot; &amp; 6&quot; AC waterlines with 8&quot; PVC</td>
<td>Otis Street (Frontage Road to Miles Avenue)</td>
<td>May 2016</td>
<td>$326,810</td>
</tr>
<tr>
<td>7</td>
<td>Replace ex. 4&quot; &amp; 6&quot; AC waterlines with 8&quot; PVC</td>
<td>Frontage Road &amp; Bliss Street to Brooke Avenue</td>
<td>May 2017</td>
<td>$150,943</td>
</tr>
<tr>
<td>8</td>
<td>Replace ex. 4&quot; &amp; 6&quot; AC waterlines with 8&quot; PVC</td>
<td>Merriam Street &amp; State Street</td>
<td>May 2018</td>
<td>$392,164</td>
</tr>
<tr>
<td>9</td>
<td>Provide 8&quot; PVC waterlines to oil tanks</td>
<td>Te Oil Tanks</td>
<td>May 2019</td>
<td>$700,118</td>
</tr>
</tbody>
</table>

**TOTALS:** 9 Years $4,174,529
5.6. Existing Sanitary Sewer System

The Town of Fort Laramie’s existing sanitary sewer system currently has numerous deficiencies. The first area of concern, much like the Town’s water system, is the age and type of pipe currently used in the system. The majority of the Town’s sanitary sewer pipelines were installed in the early 1960s. The Town also installed a fair amount of sanitary sewer pipe in the early 1970s. The pipe installed in the 60s and 70s was Vitrified Clay Pipe (VCP). Although great strides have been made by the National Clay Pipe Institute over the last forty or fifty years to improve their VCP, there is little doubt that the VCP installed for Fort Laramie in the early 60s and 70s would not meet today’s standards for the conveyance of wastewater. Based on records we estimate the current sanitary sewer pipe network consists of approximately: 650 lf of 12” PVC, 2,800 lf of 12” VCP, 350 lf of 8” PVC, and 12,200 lf of 8” VCP. The majority of the Town’s sanitary sewer deficiencies lies within their current pipe network and is a direct result of the aged VCP. These deficiencies will be further examined and addressed below in the Implementation and Recommendations section.

The Town’s wastewater is piped to their sewer lagoons via gravity sewer lines. The Town currently uses three lagoons in their treatment process. Originally the system only consisted of one unlined sewer lagoon which was installed in 1960. The bottom of the lagoon was 180’ wide by 340’ long. The lagoon averaged approximately 5’ in depth to the high water level at the time of construction which places the lagoon’s original capacity at approximately 2.3 million gallons. The Town then added the other two lagoons in the late 80s or early 1990s. However, these lagoons were constructed with liners. Currently the two new lined lagoons are first and second in the process with the third lagoon acting as the last in the stabilization system. The process allows wastewater to enter the first pond and then slowly make its way to the third and final pond where the wastewater naturally leaches back into the groundwater or evaporates.
Occasionally the Town must discharge when maximum capacity in their lagoons is reached. When discharges occur the receiving water is the North Platte River and the Town is held to the requirements of the discharge permit located in Appendix E. The current permit is due for renewal in October of 2010. In talking with Town water and wastewater maintenance personnel, the Town has not had any problems with meeting the discharge requirements as spelled out in the permit.

5.6.1. **Sanitary Sewer Pipelines**

As cited previously, the age as well as the type of pipe currently used within the sanitary sewer pipe network presents many problems and concerns for the Town of Fort Laramie. The VCP from the 1960s and 1970s time frame is severely susceptible to root intrusion. In addition to root intrusion, it is not uncommon for VCP to sag or heave. Both of these potential issues result in line blockage or breakage and cause major problems for municipalities. Also, the VCP from the 60s and 70s was very brittle and could easily be infiltrated; this issue is compounded in Fort Laramie's situation because this pipe is approaching fifty and sixty years old.

The Town currently experiences the issues described above in their current system. The Town states that they have multiple areas where they cannot get a camera down the sewer lines due to line blockage even after the sewer lines are attempted to be cleaned of debris through a jetting process. These areas demonstrate severely restricted flows that could potentially result in major problems. The restricted flows are due to any or all of the aforementioned problems associated with VCP from this time era. The Town also states that even in the sewer lines that they can get a camera through, they witness serious root intrusion. These root issues will only continue to worsen as time goes on before eventually becoming blockages or possibly breaking the pipe.
The Town of Fort Laramie also experiences surcharging (when the flow depth within the gravity main exceeds the diameter of the carrier pipe) of their existing sewer lines at times. Fort Laramie has areas that surcharge when cleaning the lines through a jetting process. When this happens, it forces water into existing structures along the sewer line. This is a major liability for the Town of Fort Laramie. This issue can be attributed to one or all of several reasons: a line blockage, inadequate pipe grades, or insufficient sewer line depths. In addition to the surcharging of mains as a result of cleaning the lines, the Town also experiences surcharging of wastewater within their existing sewer mains as a result of the same issues.

In addition to the actual sewer pipelines themselves, there is also another area of concern related to age and type of construction. The manholes currently in the Town’s system were installed at the same time as the pipelines and are therefore extremely old as well. The manholes were constructed in place of block and brick. Because of the age and type of construction used for the manholes they are falling apart. The manholes then become areas for infiltration of groundwater, sand, gravel and dirt. Also, these manholes do not have a ladder or any suitable means of egress which is a maintenance and liability concern for the Town of Fort Laramie. It can be stated that the existing manholes within the sanitary sewer system are in as bad of shape or in worse shape than the Town’s existing sanitary sewer pipelines.

Upon reviewing the numerous areas of concerns and issues associated with the Town of Fort Laramie’s existing sanitary sewer system, the Town’s current system is destined for major failure unless these system deficiencies are addressed. They are already starting to see major failures, and don’t have many options for remediation with the current system in place. Therefore, it is our recommendation that the Town plan for and proceed with the replacement of all existing vitrified clay pipe and manholes within their sanitary sewer system. Please reference the sewer main improvements spreadsheet detailed on a per block basis located in Appendix B as well as the sewer utility map located in
Appendix D. In addition to the appendices please reference the following proposed improvement schedule to determine when the aged pipe and manholes will be removed and replaced.

5.6.2. Sanitary Sewer Lagoons

As previously mentioned, the Town’s current wastewater treatment operation is very simple, but it still presents many areas of concern and challenges for the Town of Fort Laramie. The goal of this rudimentary lagoon stabilization system is to have the quality of wastewater improve from lagoon to lagoon before reaching the best quality possible in the final lagoon. However, the Town states that their lagoon system does not conform to this standard of operations. Fort Laramie states that currently their quality of water is better in lagoon #1 than it is in lagoon #3. In other words, their process is actually reversed; their quality is degraded as it traverses through the lagoons as opposed to upgraded as it should be.

One possible explanation for this is that, as stated above, the original lagoon was constructed in 1960 and no maintenance has been performed to this lagoon since its inception. That means that no work has been completed on the original lagoon during its nearly 50 years of service. The Town had a sludge profile completed for the original lagoon a couple years ago and were told that the sludge was at least 2’ in depth for the entire area of the lagoon. This contributes greatly to the poor quality witnessed within lagoon #3. In addition to the sludge creating water quality issues in lagoon #3, it is also affecting capacity. With 2’ of sludge within the lagoon, the Town has nearly cut the lagoon’s capacity in half. Therefore, where the lagoon in 1960 was estimated at approximately 2.3 million gallons, its capacity is now approximately 1.2 million gallons. That being said, the Town’s second concern with their current lagoon system is capacity.
The Town experiences instances of surcharging in their upstream gravity sewer mains about 3 to 4 times a year as a result of the lagoons filling to levels above their containment capacity. During these occasions they experience wastewater surcharges upstream approximately 325' in their outfall sewer from lagoon #1. Fort Laramie avoids a North Platte River discharge whenever possible, but sometimes their situation warrants them to discharge in order to receive additional waste. The Town estimates that they currently discharge from their lagoons approximately 3 to 4 times a year. In the event of a discharge the Town is held to the requirements of their discharge permit located in Appendix E. The Town will have a hard time meeting the requirements of the permit in the future if their system remains as is.

There are many wastewater treatment options that would be much more effective than the existing lagoon system; however, these options are simply not feasible for the Town of Fort Laramie because of their high costs for construction and operation & maintenance. The Town’s current lagoon system is economically and operationally superior due to the Town’s population and limited staff. However, we recommend that several upgrades be completed to make the current process much more efficient from a treatment and capacity perspective. The Town should place a flow monitoring device in the manhole just upstream of their lagoons so that inflow to the lagoons can be properly monitored and recorded. This will help the Town predict when they will reach capacity and need to discharge before they start seeing surcharging of their system. We feel that understanding the flow coming into the lagoons is a necessary component in making the current process more efficient.

In addition to adding flow monitoring to the lagoons, we feel that something must be done about the quality of water in lagoon #3. As previously stated, as the last lagoon in the series, lagoon #3 should have the best quality of water out of the three lagoons and that is currently not the case. Therefore, we recommend that, at a minimum, lagoon #3 have the 60 years of sludge dredged out. This will not only help quality but also capacity
as the lagoon will be back to its full 5’ depth. If lagoon 3 can be dredged to achieve its original capacity (2.3 million gallons), then the overall capacity of the town’s waste water lagoon system would be increased to about 9 million gallons, taking into account lagoon 1 and 2 (3.4 MG for lagoon #1 and 3.5 MG for lagoon #2). Based on purely a hydraulic loading calculation, a lagoon capacity of 9 million gallons would allow the Town to support a population of approximately 500 people assuming an average daily use of 100 gallons per person per day. This calculation was based on the WDEQ Chapter 11 requirement for a minimum of 180 days detention time for facultative (non-aerated) lagoons.

We also feel that it would be prudent for the Town to have the entire lagoon process analyzed for proper operation. The goal of a lagoon system, such as this, is to settle the majority of the solids out in the first two lagoons so that the third lagoon has very little solids in it and thus the quality of water is much better. That being said, the retention time in each lagoon should be adequate enough to allow the lagoon system to operate in this fashion. At this point we cannot be convinced that the system is functioning properly.

Once lagoon #3 has been dredged, and assuming that the operation of the system has been deemed acceptable, if the quality of water in lagoon #3 is not much better than the first two lagoons, the Town will need to explore further options. There is no point in having three lagoons in a series if the process is not achieving the desired results. In planning for the future, the requirements placed on the Town regarding their wastewater will only become more stringent. Therefore, if the Town is required to pursue further options, we would recommend that a recirculation line be installed in the lagoon system. The purpose of this line would be to send wastewater from lagoon #3 back to lagoon #1 to start the process over again. The process would then be continuous. This option should be used as a last resort, and would be for short-term compliance to the Town’s discharge permit until a more permanent solution can be implemented. Other alternatives
that could be considered in the future would be an Advanced Integrated Pond System (AIPS), where an anaerobic pond would be installed at the front end of the treatment process, followed by an aeration pond and finally a finishing pond before discharging to the North Platte River.

5.6.1. Proposed Sanitary Sewer Improvement Schedule

The improvement schedule used for the sanitary sewer was attempted to match the waterline replacement as closely as possible so that the Town could plan to have water and sewer completed on the same street at the same time. Planning this way will result in the Town only having to pay one mobilization fee and one surface restoration fee. In addition, the residents on the street will only be inconvenienced one time as opposed to twice. Therefore, please reference the proposed sanitary sewer improvement schedule as detailed on Table 5.2 on the following page. Like the costs associated with the water improvement schedule, appropriate inflation factors (5%) have been applied so that the estimated project costs are representative of the projected date of construction. Again, for every year beyond the projected date of construction an inflation factor of at least 5% should be added to the estimated project costs.
Table 5.2
Proposed Sanitary Sewer Improvement Schedule

<table>
<thead>
<tr>
<th>Priority</th>
<th>Project Description</th>
<th>Project Location</th>
<th>Projected Date of Construction</th>
<th>Estimated Project Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
<td>Install flow monitoring device at sewer lagoons</td>
<td>Sewer Lagoons South of Town (MH 57 or MH 58)</td>
<td>ASAP</td>
<td>$8,000</td>
</tr>
<tr>
<td>*</td>
<td>Dredge lagoon #3</td>
<td>Sewer Lagoons South of Town</td>
<td>ASAP</td>
<td>$306,000</td>
</tr>
<tr>
<td>*</td>
<td>Lagoon system analyzing</td>
<td>Sewer Lagoons South of Town</td>
<td>ASAP</td>
<td>$5,000</td>
</tr>
<tr>
<td>1</td>
<td>Replace ex. 8&quot; VCP sewer with 8&quot; PVC</td>
<td>Miles Avenue (North Corporate Limit to State Street)</td>
<td>May 2011</td>
<td>$240,513</td>
</tr>
<tr>
<td>2A</td>
<td>Replace ex. 12&quot; VCP sewer with 12&quot; PVC</td>
<td>Manhole 39 south to sewer lagoons</td>
<td>May 2012</td>
<td>$407,058</td>
</tr>
<tr>
<td>2B</td>
<td>Replace ex. 8&quot; VCP sewer with 8&quot; PVC</td>
<td>Brooke Avenue (Otis Street to Merriam Street)</td>
<td>May 2012</td>
<td>$141,415</td>
</tr>
<tr>
<td>3</td>
<td>Replace ex. 8&quot; VCP sewer with 8&quot; PVC</td>
<td>Lawton Avenue (North Corporate Limit to State Street)</td>
<td>May 2013</td>
<td>$241,988</td>
</tr>
<tr>
<td>4</td>
<td>Replace ex. 8&quot; VCP sewer with 8&quot; PVC</td>
<td>Frontier Addition &amp; Fifth Addition to Laramie Avenue</td>
<td>May 2014</td>
<td>$289,242</td>
</tr>
<tr>
<td>5</td>
<td>Replace ex. 8&quot; VCP sewer with 8&quot; PVC</td>
<td>Laramie Avenue (Gregg Addition to State Street)</td>
<td>May 2015</td>
<td>$429,483</td>
</tr>
<tr>
<td>6</td>
<td>Replace ex. 8&quot; VCP sewer with 8&quot; PVC</td>
<td>Otis Street &amp; Bliss Street</td>
<td>May 2016</td>
<td>$241,185</td>
</tr>
<tr>
<td>7</td>
<td>Replace ex. 8&quot; &amp; 12&quot; VCP sewer with 8&quot; &amp; 12&quot; PVC</td>
<td>Fifth Addition (remainder)</td>
<td>May 2017</td>
<td>$321,670</td>
</tr>
<tr>
<td>8</td>
<td>Replace ex. 8&quot; VCP sewer with 8&quot; PVC</td>
<td>State Street</td>
<td>May 2018</td>
<td>$238,432</td>
</tr>
</tbody>
</table>

TOTALS: 8 Years $2,863,986
5.7. Existing Surface Water Drainage

The Town currently has only one street with a buried storm sewer, and that is Laramie Avenue. The Town’s storm water then traverses via earthen swales (borrow ditches) and culverts to an area in the south part of Town near the railroad tracks. We could not determine any areas where the surface water could cross the tracks to make its way to the North Platte River or another acceptable creek or stream.

5.8. Surface Water Drainage Implementation and Recommendations

The Town expressed a couple of deficiencies regarding their current surface water drainage. Fort Laramie states that during heavy rain events they do see areas of flooding. One of these areas is Laramie Avenue. The buried storm sewer inlets on the bottom side of Laramie Avenue cannot keep up with heavy rains, and eventually the storm water makes its way over the curb and floods nearby businesses. This could be attributed to a number of possibilities. The storm sewer could be undersized, or the area where the storm sewer daylights becomes over capacitated and requires a large amount of head pressure to allow discharge. In addition, the earthen swales and culverts also become overrun during heavy storm events.

We recommend that the Town deal with these areas of flooding by making sure that the surface water has a place to discharge. Discharge, in this case, refers to some conduit for which the surface water reaches an acceptable body of water such as the North Platte River. As stated previously, we could not find anywhere that the surface water could get across the tracks and make its way to a place of discharge. That being said, the railroad tracks will provide the biggest challenge in this process. The railroad will have to be involved, and this will likely require a lengthy bore under the railroad tracks. Once the surface water has been allowed to reach the south side of the railroad tracks the Town can construct earthen swales and/or culverts so the water can reach an acceptable body of
water. The Town can also explore a much more expensive option of piping the surface water all the way to the discharge point underground. With this option the Town does not have to deal with areas of standing water, but as mentioned it will be a lot more expensive and require proactive maintenance to ensure longevity. Allowing the surface water a place to discharge will go a long way in addressing the majority of the Town’s surface water concerns. That being said, it is not feasible for the Town to dig up the buried storm sewer on Laramie Avenue to simply upsize the pipe, as they would be forced to remove and replace much of the existing pavement. If the Town has plans to reconstruct Laramie Avenue in the future, it would be best to wait and deal with storm sewer issues at that time.

Since there is not an immediate need to address the Town’s surface water concerns at this time, we have not provided an improvement schedule. Regarding cost estimates, earthen swales are relatively inexpensive, but costs must be computed on a case by case basis because quantities vary from location to location significantly. As for buried storm sewer piping, those costs would be somewhat comparable to sanitary sewer piping costs, but the pipe sizes would be much larger in diameter and thus much more expensive than anything we have detailed on the sanitary sewer estimates. Please reference the surface water cost spreadsheet located in Appendix B for costs per average block. The costs assume a 24” storm sewer with 12” laterals.
5.9. Street Surface Improvements

Another area of improvement the Town has expressed interest in, regarding their existing infrastructure, is the type of streets they have. The Town stated that they prefer paved streets to gravel streets. Currently only one street in the Town is paved, Laramie Avenue or Main Street. There are numerous obvious benefits to having a paved street versus a gravel street, but currently the Town does not have the need to pave their streets only a desire to pave their streets. Therefore, we did not prioritize the Town’s street paving operations, but we have provided cost estimates on a street by street basis so the Town has an idea of cost and impact should they decide to pursue the paving of their streets. The Town did state that they would like to pursue the replacement of the pavement on Laramie Avenue. In addition to redoing the street surface along Laramie Avenue, the Town expressed interest in sidewalks and redoing the lighting to be more historic in stature much like Guernsey’s Main Street. It should be stated that if the Town chooses to proceed with the paving of any street, the surface water implications must also be addressed and planned for.

In Table 5.3 on the following page, we have provided opinions of probable cost for street reconstruction in Fort Laramie. However, there are a few things that must be understood about the estimates. First, the cost opinions are based on a 32' street section from back of curb to back of curb. Second, opinions are formulated using asphalt pavement not portland cement concrete pavement. Third, the costs do not allow for sidewalk on either side of the street. Fourth, there are no costs included for adequately dealing with surface water either by earthen swales and/or culverts or buried storm piping. Those costs would be in addition to the probable cost opinions provided. Fifth, no cost is provided for Merriam Street as it is State Highway 26. Finally, cost estimates are based on a construction start date of March of 2011. For every year after March 2011, a factor of at least 5% should be added to the cost opinions to accommodate for inflation. Furthermore, we would recommend that inflation be added to the unit costs provided not
the bottom line project costs. In addition to the table there is also a spreadsheet detailing the project costs on a per block basis located in Appendix B, this is where information on unit costs can be obtained. For information purposes, if Laramie Avenue was put back at its current width as opposed to the 32’ section described above, it would cost the Town approximately 1.2 million to complete.

Table 5.3
Street Improvement Probable Costs

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Project Location</th>
<th>Projected Date of Construction</th>
<th>Estimated Project Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street Reconstruction</td>
<td>Laramie Avenue</td>
<td>May 2011</td>
<td>$825,000</td>
</tr>
<tr>
<td>Street Reconstruction</td>
<td>Lawton Avenue</td>
<td>May 2011</td>
<td>$600,000</td>
</tr>
<tr>
<td>Street Reconstruction</td>
<td>Miles Avenue</td>
<td>May 2011</td>
<td>$625,000</td>
</tr>
<tr>
<td>Street Reconstruction</td>
<td>Brooke Avenue</td>
<td>May 2011</td>
<td>$360,000</td>
</tr>
<tr>
<td>Street Reconstruction</td>
<td>Cole Avenue</td>
<td>May 2011</td>
<td>$170,000</td>
</tr>
<tr>
<td>Street Reconstruction</td>
<td>Frontage Road</td>
<td>May 2011</td>
<td>$235,000</td>
</tr>
<tr>
<td>Street Reconstruction</td>
<td>Otis Street</td>
<td>May 2011</td>
<td>$880,000</td>
</tr>
<tr>
<td>Street Reconstruction</td>
<td>Bliss Street</td>
<td>May 2011</td>
<td>$510,000</td>
</tr>
<tr>
<td>Street Reconstruction</td>
<td>Custer Street</td>
<td>May 2011</td>
<td>$450,000</td>
</tr>
<tr>
<td>Street Reconstruction</td>
<td>State Street</td>
<td>May 2011</td>
<td>$450,000</td>
</tr>
<tr>
<td>Street Reconstruction</td>
<td>Holly Street</td>
<td>May 2011</td>
<td>$170,000</td>
</tr>
<tr>
<td>Street Reconstruction</td>
<td>Park Road</td>
<td>May 2011</td>
<td>$170,000</td>
</tr>
<tr>
<td>Street Reconstruction</td>
<td>Railroad Street</td>
<td>May 2011</td>
<td>$410,000</td>
</tr>
<tr>
<td>Street Reconstruction</td>
<td>Fort Street</td>
<td>May 2011</td>
<td>$265,000</td>
</tr>
<tr>
<td>Street Reconstruction *</td>
<td>South Street *</td>
<td>May 2011 *</td>
<td>$265,000 *</td>
</tr>
<tr>
<td>Street Reconstruction</td>
<td>Dubuque Street</td>
<td>May 2011</td>
<td>$170,000</td>
</tr>
</tbody>
</table>

* Not in Corporate Limits
5.10. Additional Improvements

In addition to the more obvious infrastructure improvements described above, the Town also expressed interest in constructing a walking and biking trail from Town to Historic Fort Laramie. Please see the Fort Laramie Historic Walk/Bike Trail map in Appendix D. The Town of Fort Laramie has a unique opportunity that not many municipalities have in that there is a lot of history associated with the area. That being said, if the Town does proceed with construction of the trail, we would recommend several historical points of interest be placed along the approximately 2.5 mile trail. The trail would be constructed within the right-of-way of Wyoming 160 and would follow Wyoming 160 to the historic Fort’s gated entrance. In addition to the points of interest along the path, the Town should also incorporate several rest and/or exercise areas along the trail. We estimate that the described walking and biking trail at a width of 10’ would cost approximately 1.4 million dollars. However, trails such as this are typically constructed in multiple phases. Therefore, if the Town looks forward to completing the trail in five phases the approximate cost per phase would then be a much more favorable $280,000. Opinion of probable cost is based on a construction date of March 2011, for every year after March 2011 a factor of at least 5% should be added to the cost opinions to accommodate for inflation.

5.11. Public Facility Improvement Summary

The Town of Fort Laramie has many public improvement needs to be addressed as detailed in this section of the report. Their most pressing needs center around upgrading their water, sewer, and waste water treatment utility infrastructure. These utilities are very old and in need of upgrade if the Town is to provide their residents with a water and sewer infrastructure that is in conformance with Wyoming DEQ standards, and has the necessary capacity and flexibility to serve the Town for the future. Street and drainage improvements are also critical to the Town’s ability to provide a reliable and safe
transportation network throughout town, and improvements in these two areas need to be considered as the Town moves forward with infrastructure improvements.

Finally, improvements to public park facilities do need to take place in order to bring the public restrooms at both the north and south community parks up to ADA standards, and to allow them to be used on a more year round basis. Additional improvements to the community parks can also be considered by the Town, such as additional or newer playground equipment and court (basketball, tennis, and etc.) type improvements. Finally, a good infrastructure amenity improvement that the Town of Fort Laramie should consider is the construction of a pathways trail from Town to Old Historic Fort Laramie to tie the community to this important historical site (Reference the Public Facilities Improvement map on the following page).
6. HOUSING

6.1. Housing Market & Projections

In order for the Town of Fort Laramie to achieve and sustain development and economic growth, they will need to be able to insure and/or provide adequate housing for the community at large. An adequate and affordable housing supply is critical to allow prospective employers and employees to feel comfortable about moving into an area.

At present, the housing market in Fort Laramie is stagnant, which results in a lack of growth within the community. In analyzing the current housing trends for Goshen County, and Fort Laramie in particular, the following factors are considered in this study as examined in the November 2006 Housing Needs Assessment completed by Compass Communications for the Goshen County Economic Development Corporation (GCEDC):

✓ Demographic trends and forecasts
✓ Local economy and employment
✓ Existing housing stock and production
✓ Household characteristics and needs, including the following:
  • Rental housing
  • Ownership
  • Housing needs from job and household growth
6.1.1. Demographic Trends and Forecasts for Fort Laramie

Because of the size and a lack of a major sustainable employer in Fort Laramie, the potential for growth within the community based on the current economic climate is minimal. Based on the 2009 Community Profile (Reference Appendix A) for the Town of Fort Laramie, the median household income for the Town is $22,500, the median family income is $32,917, and the per capita income is $13,236. The median home value for Fort Laramie is $97,312, with a median monthly rental cost of $586.

According to Town staff, the trend in recent years has been for individuals or families to purchase existing cheaper homes in Town (most likely older stock housing greater than 50-years old) to live in, but they do not try to upgrade or even maintain the home. This has caused a problem because as these homes become more dilapidated from a “lack of attention”, the surrounding home values become further depressed and less attractive to potential buyers. This affects the town’s ability to attract new employers and/or potential employees because people want to feel like they are coming to a community that is vibrant and sustainable, and not one that gives the impression that they do not care about growth or displaying a positive public image.

Public image will be important for the Town of Fort Laramie to attract new business and to sustain their existing economy. With the existing Historic Fort Laramie only 2.5-miles from town, there is plenty of potential for Fort Laramie to improve the landscape of the community and diversify the economy. The first step in becoming a growing or sustainable community is to project a positive image and a willingness to attract business opportunities.
6.1.2. Local Economy & Employment

As with many small rural Town's in Wyoming, Fort Laramie's local economy is somewhat limited, consisting mostly of small commercial type businesses including: novelty shops, small convenience stores, restaurants and bar establishments to list a few. Most of these businesses tend to be family owned and operated, and as a result, do not attract, or require, a significant work force. These types of businesses, if they are to survive, tend to be passed on to the next family generation or a local buyer, as opposed to an outside buyer or employer that has to relocate to run the business. As a result, from an economic and employment perspective, there is little potential for growth from within the community unless the town takes better advantage of other business opportunities.

One of the biggest advantages Fort Laramie has going for itself is its proximity to the Historic Fort Laramie Site, and the tourism industry that can be tapped into as a result. Visitor Centers, Museums, historical based art galleries and novelty stores could be easily incorporated into the local economy to take advantage of the tourism industry, particularly during the summer months of the year. Expanding the local economy into this area could help provide a good sustainable business center for the Town, and develop a business niche for the community.

In addition to taking advantage of the tourism potential for the community to stimulate the local economy, the Town should also look at and try to take advantage of the workforce influx from other major employers throughout Goshen County in the near term, if the Town is to experience any moderate growth over the next 10 to 20 years. With the State of Wyoming's new Medium Security Correctional Institution opening in Torrington in early 2010, a work force influx will occur to staff the facility. Upwards of 350 employees will be needed to staff this facility, and only one third of this workforce is expected to be hired locally. As a result, the housing market in Torrington is currently inadequate to handle this workforce influx that will be necessary to staff and run the
correctional institution. Therefore, many workers will need to look elsewhere in Goshen County to secure housing, which opens up opportunities in communities such as Fort Laramie because of the relatively short commute between Fort Laramie and Torrington.

Another major employer near Fort Laramie that is planning to expand their operations is the National Guard Camp in Guernsey, Wyoming. According to Claudia Teeters (Quality Assurance Office at Camp Guernsey and community liaison), the National Guard Camp will be increasing its level of service annually over the next several years.

In 2005, Camp Guernsey was designated as a Maneuver-Training-Center-Heavy (MTC-H), which has opened the door for them to take on many new training opportunities to go along with the increased funding being allocated to this facility. Future expansions to this facility are to include additional Federal military, Federal Civilian, and state jobs on post. These planned positions will be phased in over time at Camp Guernsey through 2014 to an employment level of 405 full time personnel. Currently, Camp Guernsey employs approximately 257 personnel. As a result of this expected growth over the next 4 to 5 years, housing is going to become a critical issue for the Town of Guernsey, and therefore open up opportunities for Fort Laramie to capitalize on this growth. In particular, Fort Laramie could look to expand upon the level of rental housing and apartments in the community to take advantage of expected growth at Camp Guernsey.

In addition, the Burlington Northern & Santa Fe Railroad is expected to continue their double tracking from the Wyoming/Nebraska border west to Guernsey, Wyoming over the next 10-years. As a result, an increased work force (albeit temporary) in the area will need to be provided as this work progresses, and Fort Laramie would seem to be a prime location for workers to live and commute from. However, in order for Fort Laramie to take advantage of the anticipated work force influx from the above major employers in Goshen and Platte Counties, they will need to insure that they have an adequate supply of housing to address this potential need.
6.1.3. Existing Housing Stock & Production

The town of Fort Laramie was founded in 1923. As a result of the town being a small rural community, many of the homes now in use are between 60 and 80 years old. According to the November 2006 Housing Needs Assessment for Goshen County, Fort Laramie has approximately 64 housing units that were built prior to 1940. Homes over 50-years of age are generally considered to be “unsuitable”, and in need of rehabilitation and/or replacement. Homes of this vintage are generally in need of safety upgrades, and are not energy efficient. With an aging housing market, the availability of quality reliable housing within the community has diminished, making it more difficult for the Town to attract people willing to relocate to Fort Laramie. Further complicating the issue is the apparent “lack of attention” being given to the general upkeep of some of the existing homes in town, which reduces the likelihood of extending the useful life of those homes, reducing the availability of quality housing stock within the community.

Since January 2008, the town of Fort Laramie has had 7 homes for sale on the market, and five of those seven have since been sold. These homes have been priced in the range of $25,000 to $105,000, and are between 1,000 sf and 1,700 sf. The two homes that are still on the active market have been on the market for less than a year, and are currently priced at $45,000 (built in 1930) and $89,000 (built in 1949). The majority of these seven homes were built between 60 to 90 years ago, with the oldest of the homes built in 1919 and the most recent home being built in 1982. Individuals or families looking for a starter home could look to Fort Laramie to fill this need. Home prices in Fort Laramie may seem appealing to individuals and families looking for starter homes, however, as can be seen in the age, size and condition of the housing stock, the quality of the home will certainly not be up to current home building standards.

In addition to the homes that are currently on the market in Fort Laramie, there are several existing homes that currently are unoccupied, but are not on the market. At
present, there are approximately 11 homes in Fort Laramie that are unoccupied. According to Town staff, the majority of these unoccupied homes are old and most likely in need of major repairs. These homes would probably fit into the lower income end of the housing market, but could probably be sold more readily and reasonably if they were taken through a renovation and repair process.

With the number of existing homes currently on the market, coupled with the existing homes that are currently unoccupied, there appears to be a reasonable amount of existing housing available within the Town for potential buyers or developers to consider. It also appears there are potential opportunities for new housing construction for the Town to take advantage of with the number of vacant lots available. Single family and multi-family housing units could be constructed on the available lots if property owners are willing to make the investment.

It should also be considered for current or future owners of homes over 50-years old in Fort Laramie to have existing homes put through either a major remodel or torn down and then rebuilt to current design standards. All communities at some time or another need to consider the replacement of their housing stock just like any other common utility need. This should be done not only for the homes structural stability and overall safety, but also for the community aesthetics and market sustainability. The concept of providing replacement housing will be discussed further in the following pages.

Finally, there are approximately 41 vacant lots in town. The majority of vacant lots are in residential areas, and could possibly be used for future housing and/or multi-family development properties. In some instances these vacant lots are owned by adjacent home owners to provide them with greater space for storage or to create a greater buffer between the adjacent home owner. Reference the Vacant Lot area map located on the following page for more information.
6.1.4. Household Characteristics & Needs

The majority of the households in Fort Laramie are occupied by low to middle income families. According to the 2009 Community Profile for the Town of Fort Laramie, the median household income is $22,500, which is only slightly above the poverty line for an average sized household in the lower contiguous 48 States. One of the concerns throughout Goshen County is the need to have an adequate stock of low to medium income level housing available, particularly with the opening of the State of Wyoming’s Medium Security Correctional Institution in early 2010. The State of Wyoming had hoped to hire a greater percentage of their work force for this new correctional facility locally, however, this has not turned out to be the case. It is now estimated that only about 20% of the workforce for the correctional facility will be hired from the local Goshen County area, therefore, a much greater need for housing has come about than originally anticipated. A fair percentage of the workforce for the new prison facility is coming from areas outside the State of Wyoming, such as Michigan, where the job market has been depressed for almost 2 years.

There are families moving into the area that have been out of work for a considerable amount of time, and do not have a disposable income sufficient to purchase a higher income level home. As a result, they are being left on the outside looking in to a housing market that is not very favorable to work with. Communities such as Fort Laramie are in a position to assist in this effort to provide medium to lower income housing to supplement this short fall. Vacant lots are available in town and could be developed to provide affordable housing alternatives for a growing work force. Of the 41 vacant lots that have been identified in Fort Laramie, only about 20% to 30% of them would be considered to be more readily available for housing development. Also, because correctional facility jobs as well as jobs at the National Guard Camp in Guernsey are more “transitional” type jobs where employees do not tend to stay in one place for a long period time, the need for adequate multi-family dwellings including rental housing and
apartments is evident to accommodate a work force that experiences a higher level of turn around.

According to the November 2006 Housing Needs Assessment for Goshen County, Wyoming, from 1990 to 1999, 92 multi-family units were constructed in Goshen County, and all of these units were built in Torrington. The Housing Needs Assessment also revealed that Fort Laramie had a total of 159 housing units, with the majority of those units being 1-unit detached homes (i.e. single family homes - 102 total). The remainder of the housing units consisted of 1-unit, attached, 2-homes; 2-unit structures (duplexes - 7) and 48 mobile homes. As can be seen, only a small percentage of the housing market in Fort Laramie is geared toward the multi-family end of the housing spectrum. However, with the anticipated increased population at the Guernsey National Guard Camp and the commissioning of the State’s new Medium Security Correctional Institution in Torrington, the Town of Fort Laramie has an opportunity to take advantage of this housing need, and in particular in the area of multi-family housing.

Another aspect of the housing market that also needs to be explored in Fort Laramie is the rental housing market. With 40% of the housing units in Fort Laramie being built prior to 1940 (64 out of 159 units), and in need of rehabilitation, there would seem to be an opportunity for individuals to purchase a home or homes and develop them into rental properties. Currently, there are 11-homes in Fort Laramie that are unoccupied for one reason or another. These 11-homes could potentially be purchased, rehabilitated, and brought up to code to be used as rental properties. This would allow the properties to be under a routine maintenance program that allows them to be kept in a better condition rather than allowed to deteriorate due to a lack of attention. By developing a rental market in Fort Laramie, the town could take advantage of a housing need for not only the community in general but for other areas of Goshen and Platte counties that are experiencing housing shortages as well.
There are several home owners in Fort Laramie who have purchased multiple adjacent lots to their primary residence. Often times, particularly in smaller communities, this is done so the property owner has more usable space and a buffer between the adjacent property. However, the purchasing of these additional lots can also serve as an investment for a home owner as well. If the economic climate within the community begins to change, and growth is being realized, then these additional lots can be either sold to prospective developers or home buyers for development. Single family homes or duplexes would be ideal for Fort Laramie, and provide a more modern housing stock for the community, which can help in attracting people to the area.
7. ECONOMIC DEVELOPMENT

7.1. Existing Economic Environment

The Economic Environment for the Town of Fort Laramie is for the most part depressed. As stated previously, the median household income for Fort Laramie is considerably lower than the county wide average ($22,500 for Fort Laramie as compared to $32,228 county wide). The lower median household income for Fort Laramie indicates that the majority of the jobs in town are more in line with small service orientated jobs that are typical of small rural communities (i.e. convenience store, small restaurant and postal service type jobs). Interestingly enough is the fact that the median household income for northern Goshen County (which includes Lingle, Fort Laramie, and northern Goshen County areas) has the highest level of median household income in Goshen County ($35,852). What this seems to indicate is that Lingle and the surrounding northern rural areas of Goshen County have a substantially higher median household income than Fort Laramie as a result of the commercial industry they possess, as well as the ranching industry in this portion of the County. The median household income for Lingle is $33,235 as compared to Fort Laramie’s $22,500. This discrepancy in median household income can be attributed to the fact that Lingle benefits from the school system they provide, as well as the fact that Wyrulec (a large utility industry and area employer) is based out of Lingle.

Fort Laramie does not have a major commercial industry that can provide a continual and consistent job market for the community with quality paying jobs. Although the Historic Fort Laramie is nearby, work at the old fort is mostly seasonal, with little opportunity for full time positions. Just east of Town, there are several petroleum oil storage tanks on the north and south sides of U.S. Highway 26. The tanks on the north side of the highway are owned and operated by Butte Pipeline and the tanks on the south side of the highway...
are owned and maintained by Platte Pipeline. However, a minimal workforce is needed to maintain these facilities, and therefore, these facilities do not provide a significant impact to the community from an economic standpoint as the few workers who are employed to maintain the facilities do not necessarily reside in Fort Laramie. However, the community may see some property tax revenue as a result of this industry.

7.2. Potential for Economic Development

Although Fort Laramie has not seen any significant amount of economic development over the past 20 to 30 years, there is potential for the community to take advantage of local economic development opportunities as well as opportunities in Goshen and Platte Counties.

7.2.1. Local Economic Development Opportunities

Currently, the Town of Fort Laramie is waiting to hear back on a grant application to the Wyoming Business Council for remodeling improvements to the Town’s Senior Center located at the southeast corner of U.S. Highway 26 and Laramie Avenue. This building is in very poor condition as a result of years of neglect. Large quantities of bat guano can be found throughout the facility, which causes odor and health concerns for the general public, and to a greater extent, the elderly population of Fort Laramie. Also, structurally this building is in poor condition and does not meet many of the current building codes, especially with regard to the Americans with Disabilities Act (ADA).
However, the Senior Center building (known as the Wolfe Building) has historical significance to the community, and the town can receive grant funding through the Wyoming Business Council for historical preservation to help fund the project. If the town can secure funding for the necessary remodeling improvements to the Fort Laramie Senior Center, this can be a good step forward in improving the economic output of the community. A well run and attended senior center can provide many benefits to a community. It allows Seniors greater access to other assistance opportunities besides the weekly or monthly gatherings for meals, but it can also become a good resource center for addressing other basic needs for the elderly in the community such as: assistance with income tax issues, health care issues, and financial issues just to name a few. State and/or County wide assistance programs can be scheduled on a routine basis to allow the Senior Center to become an active, thriving part of the community of Fort Laramie. An active Senior Center allows people, not just the elderly, to get out into the community and build relationships with other businesses that can foster further growth.

It may turn out that the current location of the Fort Laramie Senior Center is not a viable location to continue to operate a senior center. If adequate funding cannot be obtained to renovate the existing structure, then the community may need to look elsewhere to provide a home for this important community service. On a temporary basis, the new Town Hall could possibly be used to host senior events, or a more permanent location could possibly be worked out at the newly completed community center renovation at the old High School. These are current existing facilities that could be equipped to handle certain functions for the senior citizens of Fort Laramie, without having to come up with a significant amount of funding.

The Town has received feedback from the Wyoming Business Council (WBC) regarding the funding application request to renovate the existing senior center, and at this time, the WBC is not willing to fund this improvement because they do not feel it represents enough of a significant project to justify spending available funds on. As a result, the
Town is looking to expand upon the renovation of this facility to include the lowering of the existing basement (currently a 6 foot basement is located at the senior center) to increase the usable space, in hopes of generating a more significant improvement to receive funds from the WBC. Another option available to the Town to provide a more significant project for the WBC to fund would be to abandon the renovation alternative to the existing senior center and either build a new facility at a different location, or demo the existing building, basement and foundation of the current senior center, and build a new facility on the same lot. Both of these alternatives would represent much more significant improvements and would better justify to the WBC the need to fund such improvements.

Cost estimates for each of the above alternatives have been developed to compare each alternative. Renovating the existing senior center to make it ADA accessible, structurally sound, with improved kitchen and meeting facilities is estimated at $210,550. If the Town decides to demo all of the existing building structure and re-build the senior center, they will be looking at a cost of about $315,000 at an estimated cost per square foot of $180.00/sf for new construction, including demolition of the existing building. If the Town were to abandon the existing location of the senior center and build a new facility at a different location, then they will be looking at a cost of about $285,000, or $150/sf. For each of the alternatives priced above, the overall square footage of improvements are based on the same size building (25’ x 70’ outside dimension).

Other economic development opportunities exist within the Town of Fort Laramie besides the Senior Center. The Town is interested in determining the possible funding opportunities to rebuild/remodel the only remaining Black Smith Shop on N. Laramie Avenue.
Smith shop in the Country, and turning it into a Historic Museum. This old black smith shop is located at the southwest corner of North Laramie Avenue and Custer Street. With the proximity of the Town of Fort Laramie to the Historic Fort Laramie, a historical bridge can be made to link the Town to the Fort by providing a historic museum in Town. This can help bring tourists into the Town who may be in the area for the purpose of visiting the Historic Fort. Having an historic museum in town will also help the local businesses because travelers may now have a reason to stay in town longer to browse and see more of the community.

Also, an old dilapidated commercial building (a former mechanics shop that has been closed for about 20-years) has just been torn down at the northwest corner of U.S. Highway 26 and North Laramie Avenue. With the tearing down of this old building, another vacant lot has become available to develop within an existing commercial development area. With the prospect of remodeling the old Black Smith shop and the potential of having an open lot available for commercial development along North Laramie Street, there are good opportunities available for the Town to revitalize their Downtown Commercial district and improve their economic stability.

Other commercial business options that the Town should strongly consider include a gas filling station and a small grocery store. The Town did have a small Conoco filling station in town that has since been closed for some time now. This old gas station could be renovated and upgraded to current standards to provide a much needed service to the community. If room is available, a remodel of this old gas station could also incorporate a small grocery type store in the improvement to address two needs in one project if other properties are not available for a separate grocery store. This is an option the community will need to look at and consider what the best use of this property might be.

In addition to these local economic development opportunities, the Town also has the ability to improve their economic and community profile from beyond their corporate
limits. The Town of Fort Laramie can also take advantage of commercial and governmental developmental improvements in other nearby communities throughout Goshen and Platte Counties such as the new correctional facility in Torrington and the Guernsey National Guard Camp expansion for example. The following discussion will investigate the economic development opportunities Fort Laramie can take advantage of that are outside its corporate limits.

7.2.2. Goshen County Economic Development Opportunities

There are several new and existing economic development opportunities the Town of Fort Laramie can take advantage of that are based in other communities within Goshen County, Wyoming. Most notably is the Wyoming Medium Security Correctional Institution that has been built 2.5-miles east of Torrington. This correctional facility will have the capability to house up to 800 (+/-) inmates within the Wyoming Correctional System, and have a workforce staff of about 350. This facility is scheduled to open in early 2010, and the workforce (mostly from out of the area), will need to have housing available to move into. Although Torrington can absorb some of this workforce influx from a housing standpoint, they are not equipped to take on the entire burden of addressing this housing need. By adding housing units in Fort Laramie, either with single family homes or multi-family condominium and/or apartment complexes, the Town can take advantage of this county wide economic development opportunity that will be providing continual employment for a long time to come.

Another county wide economic development opportunity that Fort Laramie can take advantage of in the near future is the anticipated expansion of the Burlington Northern & Santa Fe Railroad from a single track to a double track from the Wyo-Braska State line west to at least Guernsey, Wyoming. Not only will this bring a large temporary construction workforce to the area that will be looking for lodging and recreational activities, but it will also bring a permanent work force to the area once the construction
work on the double tracking is complete because of the larger volume of train traffic that will surely follow.

Tied to this rail expansion is the planned Highway 85 overpass to tie back into U.S. Highway 26 in Torrington. This is a multi-million dollar improvement that is scheduled for year 2012, and will bring in a large, all be it temporary, work force to the Goshen County area. This work force will probably remain for at least a one to two year period, giving people an opportunity to become familiar with the area, and possibly allowing them opportunities to stay in the area. Not only do projects like this, and the others described above, bring people to the area, but they also provide for potentially better job opportunities to those already residing in Goshen County and Fort Laramie in particular. One way to help improve the economic climate for a community like Fort Laramie is to provide better jobs for those people already living in the community. Higher paying jobs allow people to have more disposable income available and a higher percentage of that money can be spent locally.

Finally, the Town should continue to explore ways to take advantage of the tourism possibilities available with Historic Fort Laramie. The proximity of the Fort to Fort Laramie makes tourism an ideal industry for the Town to explore and expand upon as a revenue source. The link between the Town of Fort Laramie and Historic Fort Laramie site can bring about many opportunities for tourism industry in Town. Expanding upon historical museum opportunities to outdoor activities including hiking trails, scenic byways, the Historic Oregon Trail, geological finds, hunting and fishing opportunities, camping and rendezvous events are just a few of the opportunities the
Town can work to take advantage of to expand upon the tourism industry within the community. A local visitors center and gift shop that provides information relative to the above mentioned activities would help promote the tourism industry for the community. This would be a good opportunity for continued small business development within the community, and could serve to attract quality professionals with strong entrepreneurial skills to the area.

The Town should keep in close contact with local and county wide organizations to stay informed about Goshen County area economic development opportunities. The Goshen County Chamber of Commerce, Goshen County Economic Development Corporation, the Greater Fort Laramie Community Development Association, Fort Laramie Business Group and the Fort Laramie Historical Association are some of the county wide organizations the Town should remain in contact with to receive current information regarding economic development opportunities to directly or indirectly take advantage of.

7.2.3. Platte County Economic Development Opportunities

Other areas of growth and expansion the Town of Fort Laramie can take advantage of are the development opportunities taking place in and near the Town of Guernsey, Wyoming. The Guernsey National Guard Camp is currently in a phase where they are experiencing annual growth in the amount of “through put” (those guard troops who come to camp Guernsey for training, but are only there temporarily throughout the year) personnel coming to the Guard Camp. This annual growth is in response to many of the world events that have occurred over the past 8-years, which has prompted the National Guard Camp in Guernsey to move into a new training center designation as of 2005. Camp Guernsey is now a Maneuver Training Center Heavy (MTC-H) facility, which means it will be increasing its operations to account for the greater training demand being placed upon it.
According to a “Camp Guernsey Pertinent Data Report” dated July of 2009, Camp Guernsey currently provides employment for a Garrison of approximately 100 people, tenant workforce of 101 people, with an additional contract workforce of 56. This constitutes a total current workforce at Camp Guernsey of 257 personnel.

According to Claudia Teeters (Camp Guernsey Quality Assurance Officer and Community Liaison), they estimate the Guernsey housing market is short by about 40 units of providing adequate housing for the permanent workforce at the National Guard Camp. Also, according to economic and workforce projections over the next 35-years, employment at the Camp is projected to increase the most in year 2014, to 405 fulltime employees. Anticipated future expansions to Camp Guernsey will include Federal military, Federal civilian, and State jobs at the post. The highest percentage of these jobs are to be phased into Camp Guernsey over time through 2014.

If the Guernsey housing market is currently short by an estimated 40 housing units, then a significant housing shortage will occur by 2014 when the total employment at the Camp is expected to reach 405, an increase of 148 personnel from current employment levels. This anticipated housing shortfall is an opportunity for the Town of Fort Laramie to capitalize on by providing housing units to help address the expected workforce influx to the Guard Camp. This could help bolster Fort Laramie’s local economy as well as provide the Town with opportunities to clean up and modernize many of their existing and vacant lots in Town.

Another economic development opportunity that could possibly occur within Platte County over the next three to four years is a waste to energy facility to be built 3 miles west of Guernsey, Wyoming. The development group promoting this facility, AREA (American Renewable Energy Associates), is currently going through the preliminary siting and permitting stages for such a facility. AREA is hopeful to be up and running by 2012 or 2013 if all goes well. They estimate this facility could employ between 85 and 100 fulltime employees, which would further put pressure on the housing market for
Guernsey. Again, Fort Laramie would be a logical community to help address some of this overflow and further bolster their local economy.

With the proximity of Fort Laramie to the Guernsey State Park and Guernsey Reservoir, the Town could also look at providing more tourism lodging in the form of either increased number of motel rooms or a greater number of R.V. camp site options. Guernsey reservoir sees extensive use during the summer months, and by providing increased opportunities for lodging within a 20-mile radius of the park should impact Fort Laramie in a positive way. Providing increased lodging will allow visitors to the Guernsey State Park or Historic Fort Laramie to visit more frequently as well as allow visitors to extend the length of time they stay in the area. The more people who come to vacation in the area will only serve to increase the potential visitors will spend money in Fort Laramie.
8. PROJECT FUNDING & IMPLEMENTATION RECOMMENDATIONS

8.1. Cost and Financing Alternatives

8.1.1. Utility Infrastructure Improvements & Expansion Funding Sources

For the Town of Fort Laramie to begin addressing their utility infrastructure improvement needs, then the Town will need to know what their funding options are to first upgrade existing utility infrastructure needs, and then begin to plan for growth in new areas. Several options exist for the Town to take advantage of funding opportunities through the State Loan and Investment Board (SLIB) to address funding needs. A summary of those funding options follows:

- Mineral Royalty Grants
- Joint Powers Act Loan
- State Revolving Funds (SRF) for Drinking Water & Clean Water projects
- Transportation Enterprise Fund

The Mineral Royalty Grant program was developed under the Authority of W.S. 9-4-604, and it allows the legislature to appropriate funds through Federal Mineral Royalties and Bonus Payments. Eligible applicants include Counties, Municipalities, Joint Powers Boards, and certain special districts. Pursuant to W.S. 9-4-604(a), the SLIB may award grants to address the following needs:

- Alleviate an emergency situation which poses a direct immediate threat to health, safety or welfare.
- To comply with federal or state mandate.
- To provide an essential public service.
The SLIB considers a federal or state mandate as it pertains to W.S. 9-4-604(a) to mean those federal or state mandates that specifically concern public health and safety. An essential public service is a public service facility owned by the applicant and available for use by the general public including the following:

✓ Water and sewer projects.
✓ Storm drainage projects.
✓ Street and road projects.
✓ Solid waste disposal projects.
✓ Acquisition of emergency vehicles.
✓ Public administration buildings.
✓ Health care facilities.
✓ Senior citizens centers.
✓ Jail and detention facilities.
✓ Facilities needed to provide services to the disabled and similar facilities as authorized by the board.
✓ Refinancing outstanding loans extended to the applicant.

As with all grant funding for projects as listed above, the applicant is required to provide matching funds towards the project. The SLIB splits the available funding into two allocations. Twelve and one-half percent of the available SLIB funds can be provided as grant funding up to 75% of the eligible project costs. Criteria for an applicant to receive 75% grant funding are:

✓ The applicant is a municipality and has a population of less than 1,300, or
✓ The applicant is located within a county where the three-year average of the local government share of state sales and use tax per capita is less than seventy percent (70%) of the statewide average, or
The applicant is a county, hospital or fire protection districts located within a county, whose assessed valuation is less than two and one-half percent (2.5%) of the State’s total assess valuation are eligible to receive grant assistance up to seventy-five percent (75%) of the eligible project costs.

If an applicant is not able to meet the above requirements, they can apply for grant money of up to 50% of the eligible project costs. The Board allocates 87.5% of the available funds to grants up to 50% of eligible project costs. A copy of the Mineral Royalty Grant Program requirements and Grant Application forms is provided in Appendix C of this report.

Joint Powers Act Loans, administered through the State Loan & Investment Board are loans that can only be awarded for facilities that generate revenue and the revenue must be sufficient to service the debt and represent prudent use of state funds. Loan terms can be up to 40-years, depending upon the life of the project. Currently, the interest rate for Joint Powers Act Loans is 5.17% through December 31, 2010. These funds could be used for utility infrastructure improvements within a new development area; however, the Town of Fort Laramie would need to make sure their water and sewer rates are sufficient to show that they would be able to pay back this loan. A Level II Wyoming Water Development Corporation study completed in June of 2008 revealed the Town’s water rates at that time were insufficient to properly fund their water utility. Since that time, the Town has addressed this shortfall by increasing their water rate to $xx.xx per month (or gallon). State Statutes stipulate that all municipal run utilities need to operate as enterprise funds, with a rate structure sufficient to service the utility.

The Wyoming Clean Water and Drinking Water State Revolving Fund is a loan program administered through the SLIB. This program consists of two separate funds, one for water system and the other for sanitary sewer systems. The Clean Water State Revolving Fund (CWSRF) has been developed to assist applicants with sanitary sewer treatment and
collection, storm water control, landfill water pollution control, and other water pollution control projects. The Drinking Water State Revolving Fund (DWSRF) has been developed to assist applicants with drinking water systems, including source, treatment plant, storage tank, and transmission and distribution line projects. State Revolving Funds (SRF) are often used by applicants for matching monies in combination with grant funds. These funds could be used by the Town of Fort Laramie to assist in extending utility infrastructure services to future development areas. A copy of the loan applications for both the CWSRF and the DWSRF have been provided in Appendix C of this report.

8.1.2. Transportation Enhancement Funding

Transportation Enterprise Fund is a Grant and Loan funding program through the SLIB that is set aside to fund projects related to public transportation, including pathways and trail projects that link important community facilities and resources to major transportation routes. This is a State funding source for public transit vehicle acquisition. Applications are submitted on an annual basis to provide non-profit organizations providing public transportation in Wyoming. Robert Tompkins is the program manager for this program, and can be reached at the Office of State Lands and Investments. A copy of the application and request form for the Transportation Enterprise Fund is provided in Appendix C of this report.

8.1.3. Building Improvements & Other Funding Sources

Other sources are available to the Town of Fort Laramie to fund the necessary developmental improvements depending upon the type of improvement and the perceived need. USDA Rural Development (USDA-RD) is currently flush with monies as a result of the American Recovery and Reinvestment Act (ARRA), and they are looking for
projects to fund. USDA -RD grant monies can be allocated to projects that address health and safety concerns, such as water, sanitary sewer, storm drainage, housing and community facility types of projects. Projects such as the improvements to the existing Senior Center and possibly some housing projects may be eligible to be funded through USDA-RD. These grant monies, in most instances, are allocated at 30% of the total cost of the project, and can be used to pay for the Engineering as well as construction of the project. If an applicant can show that they are operating their utility as an enterprise fund, then the percentage of grant monies can be increased to 45% under the USDA-RD program.

Matching monies for applicants of USDA-RD grants can come from other typical funding sources, such as SLIB monies in the form of SRF loans and the like. USDA-RD funds are federal monies that have been given to the State to address health and safety needs. However, it is important to note that with the use of federal monies come other special requirements that applicants must be able to fulfill. Specifically, applicants will need to provide for and insure that contractors follow federal Davis-Bacon employment practices throughout the life of the project. In addition, Buy America standards for materials and equipment will apply to the construction of the project. As a result, the applicant can expect the overall cost of their project to increase 10% to 30% due to the federal requirements the contractors will be held to. This will be important for the applicant to keep in mind as they are determining the budgets for their projects.

Another funding source the Town of Fort Laramie can consider is the State Administered Community Development Block Grant (CDBG) program. This is a federally funded program that provides funding to non-entitlement areas (including small communities) for the purpose of providing viable communities suitable living conditions for low to moderate income level areas of the community. Seventy percent of the grant monies must go towards the low to moderate income level areas. These monies can go towards a wide range of improvement projects from providing housing (through HUD), and
infrastructure improvements that seek to carry out community development activities. Eligible funding activities for CDBG monies include the following:

- Acquisition of property for public purposes.
- Construction or reconstruction of streets, water and sewer facilities, neighborhood centers, recreation facilities, and other public works.
- Demolition.
- Rehabilitation of Public and Private Buildings.
- Public services.
- Planning Activities.
- Assistance to nonprofit entities for community development activities.
- Assistance to private, for profit entities to carry out economic development activities (including assistance to micro-enterprises).

Besides the necessary utility infrastructure improvement projects, other community improvement projects could be funded through CDBG funds, such as the park restroom facility improvements, the remodel of the Senior Center, remodel of the Historic Black Smith Shop, and a wide range of public and private improvements that would act to stimulate development opportunities for the community. As with the USDA-RD grant funds, CDBG funds are subject to a wide range of federal requirements that include, but may not be limited to, the following:

- Davis-Bacon Employment practices.
- Buy America materials purchasing requirements.
- Other federal requirements related to employment and purchasing practices such as Disadvantaged Business Enterprises and minority employment practices.
There are several funding options available to the Town to address their infrastructure improvements associated with future land development needs. The Town’s ability to secure as much grant funding as possible will be important to allow them to maximize the amount of improvements they can accomplish at any one time, as well as to minimize the debt burden they will have to contend with if matching funds are provided through state loan options. The town also needs to make sure that they are running their existing utility services as enterprise funds to insure that they can set aside a portion of their own funds for matching monies for the projects they need to undertake.

From a funding perspective, it would appear that the Mineral Royalty Grant monies through the SLIB may be the best option for the Town to consider first. Because Fort Laramie is a small rural community with a population of less than 1,300, the Town should be in a good position to be eligible to receive up to 75% grant funding. However, it is important that the town also positions itself appropriately to receive these funds by making sure they are charging appropriate rates for the utility services they provide their customers. With matching funds provided through one of the State Revolving Funds in the form of a low interest loan at 2.5% annual interest rate, the town should be able to position itself adequately to fund the type of utility development expansion projects detailed in this report.

Although with any outside funding source there will be funding requirements that will have to be adhered to, monies from the SLIB have less stringent requirements tied to them than those funds that come from federal sources (such as the USDA-RD and CDBG grant funds). However, monies from the USDA-RD and CDBG are good funding sources to take advantage of if a community is looking to address multiple project improvements at one time that may be unrelated to one another. For instance, the Town could use monies from the SLIB to address needed water and sewer infrastructure improvements, while at the same time use funds from CDBG or USDA-RD to remodel their Senior Center or Black Smith Shop. Regardless of where the funds ultimately come
from, the town may have to be creative in developing the ultimate funding package depending upon where they have to go to secure the necessary funds. Multiple funding sources may be necessary to adequately fund a particular project.

Applying for and securing funds for a major community improvement project can be very time consuming and difficult for a community the size of Fort Laramie, particularly when time is of the essence. It would be very beneficial for the Town to have an Engineer on staff, or on retainer, to assist in the development of the funding request packages. Most engineering firms routinely perform these tasks for their clients, and are familiar with the necessary information and paperwork required from the different funding agencies. Often times Engineers perform this service free of charge (or for a minimal fee) in hopes of getting the opportunity to design the necessary improvements for their client after funding for the project(s) is secured, and Baker & Associates, Inc. is capable of performing this task for the Town of Fort Laramie.

8.2. 10-Year Action Plan

The following discussion details for the Town of Fort Laramie a recommended 10-year action plan to follow as a means of keeping on track with securing funding and completing the recommended and necessary improvements detailed in this Community Development and Strategic Plan. For the 10-year action plan, we have tried to schedule the sequence of project improvements such that the most critical improvement projects are addressed as early as possible within the first 10-years. As described earlier in this report, the Town’s most critical needs at this point center around upgrading and improving their water and sewer utility systems. Therefore, utility improvements have received a higher priority in the 10-year action plan than other ancillary improvements, such as the possible remodel of the old Black Smith shop or the park restrooms.
The 10-year action plan will start at the time this Community Development and Strategic Plan has been adopted by the Town of Fort Laramie. Projects are listed in order of importance, as Baker & Associates understands them to be, based on meetings with Town staff and council members. However, the Town should consider this 10-year action plan as a guideline only, and not necessarily as the true and only order by which these projects can be completed. Situations may arise that dictate a project originally slated for several years down the road be completed much sooner because circumstances require it become a higher priority. The following 10-year action plan will provide an approximate timeline of events that need to occur in order for a particular project to be started and completed. Critical path items such as applying for funding, start of project design, review agency approval, project bid, begin construction and finish construction will be identified with an estimated date of when each critical path item should begin.

Following is the 10-year action plan for the Town of Fort Laramie:

<table>
<thead>
<tr>
<th>Project 1: Water Storage Tank</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Apply for project funding (SLIB or WWDC)</td>
</tr>
<tr>
<td>✓ Begin project design</td>
</tr>
<tr>
<td>✓ Submit plans &amp; specifications for agency review</td>
</tr>
<tr>
<td>✓ Receive agency approval</td>
</tr>
<tr>
<td>✓ Bid project</td>
</tr>
<tr>
<td>✓ Begin construction</td>
</tr>
<tr>
<td>✓ Project complete</td>
</tr>
</tbody>
</table>
Project 2: **Wastewater Lagoons**
- ✓ Apply for project funding (SLIB) April 2010
- ✓ Begin project design November 2010
- ✓ Submit plans & specifications for agency review January 2010
- ✓ Receive agency approval February 2011
- ✓ Bid project April 2011
- ✓ Begin construction May 2011
- ✓ Project complete September 2011

Project 3: **Phase 1 Water & Sewer**
- ✓ Apply for project funding (SLIB or CDBG) April 2010
- ✓ Begin project design November 2010
- ✓ Submit plans & specifications for agency review January 2011
- ✓ Receive agency approval February 2011
- ✓ Bid project April 2011
- ✓ Begin construction May 2011
- ✓ Project complete September 2011

Project 4: **Historic Walk/Bike Trail**
- ✓ Apply for planning & engineering funding (TEAL) April 2010
- ✓ Begin planning & engineering March 2011
- ✓ Apply for phase 1 construction funding July 2011
- ✓ Submit plans & specifications for review December 2011
- ✓ Bid project February 2012
- ✓ Begin construction April 2012
- ✓ Project complete August 2012
Project 5: **Senior Center**

- Apply for project funding (WBC, CDBG, USDA-RD) April 2010
- Begin project design November 2010
- Bid project April 2011
- Begin construction May 2011
- Project complete September 2011

**Wastewater Discharge Permit Expires**

Project 6: **Phase 2 Water & Sewer**

- Apply for project funding (SLIB, CDBG) April 2011
- Begin project design November 2011
- Submit plans & specifications for agency review January 2012
- Receive agency approval February 2012
- Bid project April 2012
- Begin construction May 2012
- Project complete September 2012

**Review Utility Rate Structure**

- January 2012

Project 7: **Phase 3 Water & Sewer**

- Apply for project funding (SLIB, CDBG) April 2012
- Begin project design November 2012
- Submit plans & specifications for agency review January 2013
- Receive agency approval February 2013
- Bid project April 2013
- Begin construction May 2013
- Project complete September 2013
Project 8: Park Restrooms

- Apply for project funding (WBC, CDBG, USDA-RD)  April 2012
- Begin project design  November 2012
- Bid project  April 2013
- Begin construction  May 2013
- Project complete  September 2013

Project 9: Historic Walk/Bike Trail

- Apply for phase 2 construction funding (TEAL)  July 2012
- Submit plans & specifications for review  December 2012
- Bid project  February 2013
- Begin construction  April 2013
- Project complete  August 2013

Project 10: Phase 4 Water & Sewer

- Apply for project funding (SLIB, CDBG)  April 2013
- Begin project design  November 2013
- Submit plans & specifications for agency review  January 2014
- Receive agency approval  February 2014
- Bid project  April 2014
- Begin construction  May 2014
- Project complete  September 2014

Review Utility Rate Structure  January 2014
Project 11: **Phase 5 Water & Sewer**
- ✓ Apply for project funding (SLIB, CDBG)  
  - April 2014
- ✓ Begin project design  
  - November 2014
- ✓ Submit plans & specifications for agency review  
  - January 2015
- ✓ Receive agency approval  
  - February 2015
- ✓ Bid project  
  - April 2015
- ✓ Begin construction  
  - May 2015
- ✓ Project complete  
  - September 2015

Project 12: **Historic Walk/Bike Trail**
- ✓ Apply for phase 3 construction funding (TEAL)  
  - July 2014
- ✓ Submit plans & specifications for review  
  - December 2014
- ✓ Bid project  
  - February 2015
- ✓ Begin construction  
  - April 2015
- ✓ Project complete  
  - August 2015

Project 13: **Phase 6 Water & Sewer**
- ✓ Apply for project funding (SLIB, CDBG)  
  - April 2015
- ✓ Begin project design  
  - November 2015
- ✓ Submit plans & specifications for agency review  
  - January 2016
- ✓ Receive agency approval  
  - February 2016
- ✓ Bid project  
  - April 2016
- ✓ Begin construction  
  - May 2016
- ✓ Project complete  
  - September 2016

**Wastewater Discharge Permit Expires**  
- October 2015

**Review Utility Rate Structure**  
- January 2016
Project 14: Phase 7 Water & Sewer

- ✓ Apply for project funding (SLIB, CDBG)  
- ✓ Begin project design  
- ✓ Submit plans & specifications for agency review  
- ✓ Receive agency approval  
- ✓ Bid project  
- ✓ Begin construction  
- ✓ Project complete  

Project 15: Historic Walk/Bike Trail

- ✓ Apply for phase 4 construction funding (TEAL)  
- ✓ Submit plans & specifications for review  
- ✓ Bid project  
- ✓ Begin construction  
- ✓ Project complete  

Project 16: Phase 8 Water & Sewer

- ✓ Apply for project funding (SLIB, CDBG)  
- ✓ Begin project design  
- ✓ Submit plans & specifications for agency review  
- ✓ Receive agency approval  
- ✓ Bid project  
- ✓ Begin construction  
- ✓ Project complete  

Review Utility Rate Structure  

April 2016
November 2016
January 2017
February 2017
April 2017
May 2017
September 2017

July 2016
December 2016
February 2017
April 2017
August 2017

April 2017
November 2017
January 2018
February 2018
April 2018
May 2018
September 2018

January 2018
Project 17: Historic Walk/Bike Trail

- ✓ Apply for phase 5 construction funding (TEAL) July 2018
- ✓ Submit plans & specifications for review December 2018
- ✓ Bid project February 2019
- ✓ Begin construction April 2019
- ✓ Project complete August 2019

Review Utility Rate Structure January 2020

Wastewater Discharge Permit Expires October 2020

Project 18: Phase 9 Water

- ✓ Apply for project funding (SLIB, CDBG) April 2018
- ✓ Begin project design July 2018
- ✓ Submit plans & specifications for agency review November 2018
- ✓ Receive agency approval January 2019
- ✓ Bid project March 2019
- ✓ Begin construction May 2019
- ✓ Project complete August 2019

Review Utility Rate Structure October 2019
APPENDIX 'B'

INFRASTRUCTURE COST SPREADSHEETS
STAND-ALONE RESTROOMS
TOWN OF FT. LARAMIE, WYOMING

8'-insulated Crew walls

2'-RIGID INSUL, & CUB

4'-overhand open to front

25'-4"
**TOWN OF FORT LARAMIE**

**EXISTING SEWER SYSTEM**

**AND PROPOSED SEWER SYSTEM UPGRADES**

**PHASE 5 THRU 8**

---

**EXISTING SEWER SYSTEM UPGRADE**

Manhole 11 to Manhole 20

- Constructed 1962

**PROPOSED SEWER SYSTEM UPGRADES**

- **PHASE 5 (May 2015)**
  - Mobilization LS $521,107.00
  - Pipe Replacement LF 1500 $39,750.00
  - 4" Diameter Manhole EA 6 $54,628.50
  - 4" PVC Sewer Service Lines EA 7 $3,942.25
  - 4" Sewer Service Enter 1 EA $2,355.50
  - Surface Restoration (Gravel) $785.00
  - Total Estimated Construction Cost $329,601.00

  **Contingencies** - 10% $32,960.10

  **Total Estimated Project Cost** $362,561.10

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**PHASE 5 THRU 8**

Pipe Replacement LF 1500 $58,250.00

- 4' Diameter Manhole EA 1 $54,562.00

**Laramie Avenue Sewer Project**

4" PVC Sewer Cleaning EA 20 $6,810.00

- 4" PVC Sewer Service Line LF 200 $260.00

- 4" PVC Sewer Service Enter 1 EA $2,355.50

- Surface Restoration (Concrete) $225.00

- Total Estimated Construction Cost $343,586.75

  **Contingencies** - 10% $34,358.68

  **Total Estimated Project Cost** $377,945.43

---

**PHASE 6 (May 2016)**

Pipe Replacement LF 1500 $59,400.00

- 4" PVC Sewer Cleaning EA 20 $6,810.00

**Stale Street Sewer Replacement Manhole 20 to Manhole 35**

- Constructed 1962

- Mobilization LS $521,107.00

- Pipe Replacement LF 1500 $96,000.00

- 4' Diameter Manhole EA 6 $55,628.50

- 4" PVC Sewer Service Lines EA 7 $3,275.25

- 4" Sewer Service Enter 1 EA $2,123.75

- Surface Restoration (Gravel) $154.00

- Total Estimated Construction Cost $393,236.25

  **Contingencies** - 10% $39,323.62

  **Total Estimated Project Cost** $432,559.87

---

**PHASE 7 (May 2017)**

Pipe Replacement LF 1500 $56,750.00

- 4" PVC Sewer Cleaning EA 20 $6,810.00

** existed sewer system **

Manhole 1 to Manhole 20

- Constructed 1962

**PROPOSED SEWER SYSTEM UPGRADES**

- **PHASE 6 (May 2016)**
  - Mobilization LS $521,107.00
  - Pipe Replacement LF 1500 $96,000.00
  - 4" Diameter Manhole EA 6 $55,628.50
  - 4" PVC Sewer Service Lines EA 7 $3,275.25
  - 4" Sewer Service Enter 1 EA $2,123.75
  - Surface Restoration (Gravel) $154.00
  - Total Estimated Construction Cost $393,236.25

  **Contingencies** - 10% $39,323.62

  **Total Estimated Project Cost** $432,559.87

---

**PROPOSED ADDITIONS TO SANITARY SEWER**

**MANHOLE - PRECAST**

12' PVC SEWER MAIN

12' PRECAST MANHOLE NUMBERS

REAR BLOCK TYPE

6' PVC SEWER MAIN

6' PRECAST MANHOLE NUMBERS

**LEGEND**

- PROPOSED ADDITIONS TO EXISTING SEWER
- MANHOLE - PRECAST
- EXISTING SANITARY SEWER SYSTEM
- MANHOLE NUMBER - PRECAST
- IF PVC SEWER MAIN - PRECAST
- IF NOT SEWER MAIN - PRECAST

---

**PROJECTED SEWER REPLACEMENT**

**LEGEND**

- PRECAST MANHOLE NUMBERS
- PVC SEWER MAIN
- EXISTING SANITARY SEWER SYSTEM
- MANHOLE NUMBERS - PRECAST

---
TOWN OF FORT LARAMIE
EXISTING WATER SYSTEM
AND PROPOSED WATER SYSTEM UPGRADES
PHASE 5 THRU 8

LEGEND

EXISTING WATER MAIN
WATER VALVE
6" WATER MAIN
4" WATER MAIN
2" WATER MAIN

EXISTING WATER STORAGE TANK

NOTES:
1. WATER SERVICE CONNECTIONS INCLUDE CURB STOP, SERVICE SADDLE AND SERVICE PIPE.
2. FIRE FITTINGS ARE AN ARRAY OF MANIFOLD FITTINGS, TEES, ELBOWS, ETC.

PROJECTED WATER MAIN REPLACEMENT

TOWNSHIP ROAD:

- Existing Water Main
- Fire Hydrant Assy.
- PVC Pipe
- Gale Valve
- Street Valve
- Gate Valve
- Elbow

TOWN OF FORT LARAMIE
EXISTING WATER SYSTEM
AND PROPOSED WATER SYSTEM UPGRADES
PHASE 5 THRU 8

WATER MAIN REPLACEMENT

<table>
<thead>
<tr>
<th>Phase</th>
<th>Project</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Cost/Unit</th>
<th>Total Cost</th>
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<td>P-3</td>
<td>Gate Valve</td>
<td>5</td>
<td>EA</td>
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<td>Street Valve</td>
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<td>EA</td>
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<td>Fire Hydrant</td>
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<td>EA</td>
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<td>$31,768.55</td>
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</table>

Total Estimated Construction Cost: $43,625.00

Total Estimated Project Cost: $49,760.00

Contingencies: 15%

Total Project Cost: $57,810.00

WATER SYSTEM IMPROVEMENTS
PHASE 5 THRU 8

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<tr>
<th>Phase</th>
<th>Project</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Cost/Unit</th>
<th>Total Cost</th>
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<tr>
<td>5</td>
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<td>Fire Hydrant Assy.</td>
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<td>EA</td>
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<td>6</td>
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<td>PVC Pipe</td>
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</tbody>
</table>

Total Estimated Construction Cost: $43,625.00

Total Estimated Project Cost: $49,760.00

Contingencies: 15%

Total Project Cost: $57,810.00

FIRE HYDRANT

6'
4'
2" WATER MAIN
WATER MAIN
WATER MAIN

SCALE: 1"=100'
## Existing Water System Phase 9 (May 2019)

### Proposed Water System Upgrades Phase 9

<table>
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<tr>
<th>Item Description</th>
<th>Unit</th>
<th>Quantity</th>
<th>Unit Cost</th>
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<td>Surface Repair (Gravel)</td>
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<td>3</td>
<td>$4,600.00</td>
<td>$13,800.00</td>
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</tbody>
</table>

### Total Estimated Project Cost

- Construction: $45,885.35
- Easements: $26,000.00
- Components: $10,095.75
- Water Service Connections: $512,430.00
- Surface Repair (Concrete): $55,500.00
- Surface Repair (Gravel): $55,500.00
- Total: $577,468.10

Contingencies 10%

Total Estimated Project Cost: $645,214.91

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**NOTES:**

1. WATER SERVICE CONNECTIONS INCLUDE CURB STOP, SERVICE SADDLE AND SERVICE PIPE.
2. PIPE FITTING PRICES ARE AN AVERAGE OF VARIOUS PIPE FITTINGS, TEES, ELBOWS, ETC.
APPENDIX 'E'
WYPDES Discharge Permit