VILLAGE OF

La Farge

ECONOMIC RECOVERY PLAN

2021

Adopted by La Farge Village Board
February 8, 2021

Acknowledgements

The Vierbicher team would like to thank the numerous individuals who contributed time and energy to the creation of this plan. The vision set forth in this plan was developed in partnership with the residents and businesses of La Farge. Many business owners, residents, civic leaders and other individuals participated in the public events, provided input and agreed to be interviewed as part of this effort.

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1.0 Introduction

The Kickapoo River, with its meandering banks and lush landscape, serves as both an abundant recreational opportunity for the Kickapoo Valley as well as a devastating reminder that natural events know no boundaries. The Village of La Farge has been hit by eight of its top nine flood events since 2007. 21 of the top 22 flood events have occurred within the last 20 years, and seven Presidential disaster declarations have been executed since 2000. With very little warning and time to prepare, residents and businesses continue to be hit with devastating levels of water that continue to erode not only the landscape, but the Village's economic base.

In response to back-to-back flood events in 2018, public grant money was made available through the U.S. Department of Commerce – Economic Development Administration to assist with flood recovery efforts. The Mississippi River Regional Planning Commission subsequently submitted a successful grant application for the Village to access these funds and this Plan was prepared to create a vision and plan for economic recovery of the Village.

The intent of this Plan is to identify a phased approach on how to rebuild the local economy on safe sites for business, industry workforce housing, community facilities and public infrastructure that will allow the community to prosper over the long term. In order to identify this phased approach, the community went through an extensive visioning and community input process to identify opportunities and alternatives. Details about this process are documented in more detail in Section 2 on the next page.

Various methods of recovery were explored, including flood proofing structures, redeveloping properties at the edge of the flood plain, new growth areas for resettlement, flood mitigation infrastructure, as well as a 'No Action' scenario. Ultimately, the community developed concept plans for three resettlement sites, concept plans for flood mitigation infrastructure, a funding strategy and implementation plan for these scenarios. Discussion of these recommendations are documented in Section 6. The funding strategy and implementation plan are outlined in detail in Section 8.

The intent of the Funding Strategy and Implementation Plan are to assist the Village with moving forward quickly and efficiently with executing the recommendations within this Plan. The flood events of 2018 left the Village unsure of how to proceed; however, this Plan provides clear understanding and direction of how to slowly rebuild the local economy and ensure not only long-term viability of the Village, but a prosperous future.

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2.0 Overview of Process

2.1 Flood Recovery Committee

A Flood Recovery Committee was established by the Village of La Farge in August of 2020 to oversee the process and development of the Plan. This Committee was responsible for coordinating and listening to community concerns and investigating opportunities to assist with recovery. For this Economic Recovery Plan, the Flood Recovery Committee met monthly and was responsible for guiding the process, generating public excitement and engagement, and making recommendations for the future direction of the Village. This Committee provided monthly planning updates to the Village Board throughout the process and presented a draft Plan to them for consideration of adoption in the spring of 2021.

2.2 Public Workshops

A series of three public workshops were held throughout the planning process. Hosted at key points in the timeline, each workshop was specifically designed to present and gather feedback regarding an individual phase of the project based on what had been developed up until that point. The following is a summary of each of the three workshops.

Conceptualization Public Meeting

After preliminary alternatives, concepts, arrangements and sketches were developed with the guidance of the public input and Flood Recovery Committee, a Public "Conceptualization Meeting" was held on October 29, 2020 to solicit feedback in response to this information. The workshop gave participants an opportunity to speak more in depth about possible development scenarios and give feedback about potential land use scenarios and configurations. This meeting also provided an opportunity to present all of the assessment data and information that had been developed to date, and provide an overview of what the results meant for the master site plan and development efforts.

Configuration Public Meeting

The Public "Configuration Meeting" presented the compiled information for the recovery projects and the Site Development Master Plan. This information showed all of the components in an ordered set of renderings, diagrams, maps, layouts and schematics that make up the Master Plan, including provisions for economic development opportunities. The information also included cost estimates, preliminary environmental reviews, and identified appropriate entitlement requirements. It took into consideration the process, phasing, and other implementation-focused elements appropriate for development to process. Stakeholders attending this meeting were provided with the opportunity to ask questions, gather information, and respond with input regarding the proposed Master Plan and individual elements.

Presentation of Economic Recovery Plan

The final public meeting, prior to Village Board approval, was a presentation of the Village's complete Economic Recovery Plan. This public hearing provided the community and stakeholders with an opportunity to provide comment and ask questions

after presentation of the Plan. The Village Board considered any public input that was received as part of moving forward with consideration of the Plan.

2.3 Additional Stakeholder Engagement

The Village had completed development of a Main Street Plan during the spring of 2020. As part of this process, extensive community engagement was solicited via public workshops and stakeholder interviews. This engagement focused on the future of the community and asked participants for their ideas and insight about strengths, weaknesses, opportunities and strengths. With a high level of participation through this process, the Village chose to utilize this recent input as the first phase of public engagement for development of this Plan. The raw results from the stakeholder interviews during the Main Street planning process are included as Appendix A in this Plan. Additional recommendations and input will be incorporated throughout this document, and the entirety of results from the Main Street process can be found throughout that Plan document.

2.4 Digital Communications

The Flood Recovery Committee chose to provide digital updates and opportunities for engagement via the Village's website. This platform provided an opportunity to communicate with those stakeholders who could not participate in public meetings, or were not comfortable doing so due to guidelines put in place by CDC regarding COVID-19. Stakeholders were consistently provided with the contact information for the Public Engagement Coordinator for the process and able to speak directly to that person if they had a desire to provide input or opinions throughout the process.

3.0 Regional & Historical Context

3.1 Location Context

The Village of La Farge is located in the eastern part of Vernon County. La Farge sits at the crossroads of State Trunk Highway 82 and State Trunk Highway 131. The Village is situated in the area of Wisconsin known as the Driftless Area and is part of the Kickapoo Valley. The topography and terrain of the Kickapoo Valley and the Driftless Area are unique to parts of Wisconsin, Illinois, Iowa and Minnesota and have led to challenges with flooding, stormwater runoff, location access, and development.

Driftless Area

Figure 3.1-A: Driftless Area Initiative Boundary

The Driftless Area of southwest Wisconsin, also known as the Coulee Region, is defined as a 24,000 square mile region that escaped the flattening effects of glaciations during the last glacial event, some 12,000 years ago. This area is characterized by steep slopes, forested ridges, deeply carved river valleys, and cold water streams. The Driftless Area includes elevations ranging from 600-feet to 1,719 feet above sea level and several rivers, streams and creeks. These surface waters, often high class trout streams including the Kickapoo River, Goose Creek, Elk Creek, and Camp Creek have carved steep sloped valleys and twisting ridges out of the sandstone and limestone rock formations often called coulees or hollows.

In addition, the Driftless Area has a distinct topographic feature called Karst. Karst features are characterized by caves, disappearing streams, blind valleys, underground streams, sinkholes, and springs. All these features play a role in the persistent flooding of this region.

Kickapoo Valley

Figure 3.1-B: Middle Kickapoo River Watershed

The Kickapoo Valley was carved out by the Kickapoo River which meanders 125 miles traveling north, south, east and west from Wilton to Wauzeka, and passing through La Farge. The Kickapoo River gets its name from a translation of the Algonquin word meaning "one who goes here, then there", fitting for a crooked river that is known as the most crooked river in the world.

The ridges of the Kickapoo Valley elevate more than 350-feet above the Kickapoo River and are known to the locals as the Ocooch Mountains, phonetically translated from the Ho Chunk word "waxoj" (pronounced WAH-KOH-CH(e). These

mountains include forested hills, lush valleys, sandstone cliffs, and trout streams. The Kickapoo Valley thus the Driftless Area, with its plethora of rivers and streams along with untouched forests, and an abundance of wildlife attracted settlers to this region.

The Kickapoo Valley was originally inhabited by a group of people known as "mound builders". They built earth mounds shaped like birds or animals on the bluffs and river edges. The 1800's brought settlers to the Valley for fur trading, lumber mills and mining.

3.2 Historical Context

Settlement and Growth

The 1850's brought farming and logging to this area in West Central Wisconsin. Dred Bean built his farm and blacksmith shop at the location today known as Bean Park. A general store came to this area in 1873 and its proprietor was Mr. Thomas DeJean. DeJean also had a saw mill and grist mill, and built the general store at the crossroads of two trails (intersection of Main and State Streets), called "The Corners". After the passing of Thomas DeJean, they called the community DeJean's Corners. With all the activity coming to and passing through this area, an inn and cheese factory popped up along with other businesses. This prompted the post office to move from Seelyburg to DeJean's Corners, in 1893. The name was provided to Sam Green from a list as the postal address of the new post office, and thus the new name for this bustling community. This meant the beginning of the Village of La Farge. La Farge was incorporated in 1899. La Farge from the Norwegian word meaning "the color".

October 11, 1897 the Kickapoo Valley & Northern railroad arrived in La Farge after the completion of a tunnel on the Lawton farm, along with two more bridges. The rail dead-ended in La Farge and was never extended to Tomah. It was a 51-mile line from Wauzeka to La Farge. Chicago, Milwaukee & St. Paul purchased this railroad in 1903 and made it a branch line. The railroad brought a lot of people to La Farge and the community grew.

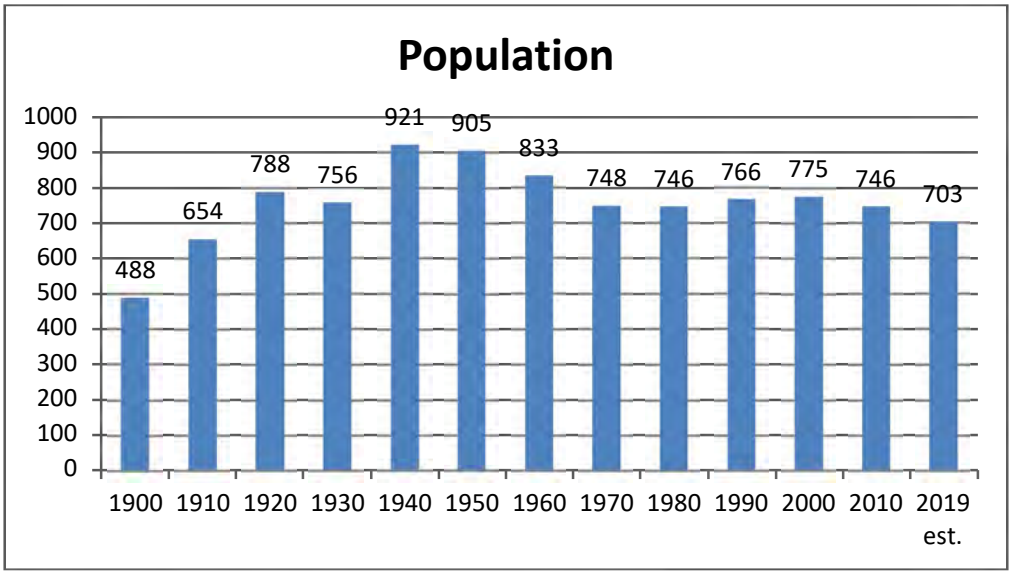
In 1935 the great Kickapoo River flood occurred, prompting future studies and the possibility of a dam. The men of the community formed a commercial club in 1937 for the purpose of bringing about uniform business practices, better harmony and to aid in the development of the community. By forming the Commercial Club, the men of La Farge hoped they would be selected as the Kickapoo River Flood Control Survey headquarters.

The Kickapoo Valley railroad ceased existence by 1937 and in 1939 State Trunk Highway 82 from Hillsboro to La Farge was completed and opened for use. This was the first state road to the Village.

La Farge's population has remained steady for the previous 40 years from 1970 to 2010, but dipped 6% in the 2010's. The Village boomed in the 40's and 50's, then began its decline in the 60's.

Table 3.2-A: Census Data Census	Population
1900	488
1910	654
1920	788
1930	756
1940	921
1950	905
1960	833
1970	748
1980	746
1990	766
2000	775
2010	746
2019 – estimate	703

Figure 3.2-A: Population by Decade



Flooding Chronology and Impacts

The most severe floods on record occurred during the intense local summer storms. The rain water would run off the steep river valleys, resulting in rapid and high-peak stormwater runoff. Examples of this are the floods of September 1938, July 1954, August 1959, July 1978, August 2007, June 2008, July 2017 and August 2018. Many of the summer flooding events were aided by larger than normal snowfall amounts during the previous winter. Additional major floods occurred in 1907, 1912, 1917, 1935, 1951, and 1956.

The National Flood Insurance Program (NFIP) was created in 1968 after the passage of the National Flood Insurance Act, and primarily in response to the lack of available private insurance and continued increases in federal disaster assistance. La Farge joined the NFIP in 1973. Here are the mapping dates for coverage of the La Farge area:

- National Flood Insurance Program Map – first published December 17, 1973
- Flood Hazard Boundary Map – Revised May 14, 1976
- Flood Insurance study (FIS) 550456V000 – Effective November 16, 1990
- Flood Insurance Rate Map – 550456 001 B (Village of La Farge, WI) – Effective November 16, 1990
- Flood Insurance Study (FIS) 55123CV000A – Effective November 2, 2012
- Flood Insurance Rate Map – 55123C0359D (Vernon Co. & Incorporated Areas) – Effective November 2, 2012
- Flood Insurance Rate Map – 55123C0378D (Vernon Co.) – Effective November 2, 2012

Flooding History, Crest Peak Inventory

According to the National Weather Service, 6-12 inches of record setting rainfall fell along the headwaters of the Kickapoo River near and north of Ontario, producing a major flood down the entire span of the Kickapoo River between August 28 and 30, 2018. In most areas, including La Farge, the flood exceeded the previous record flood of 2008, with new flood crest records being established.

- New crest record – 19.42 feet – August 28, 2018
- Old crest record – 15.78 feet – June 8, 2008

Table 3.2-B: Flood Categories

Major Flood	15 feet
Moderate Flood	13 feet
Flood Stage	11 feet
Action Stage	9 feet

Of the 22 historical crests in the chart below, 5 of those have been established in the last 10 years. The historical crests are those at or above flood stage.

Table 3.2-C: Historical Flood Crests

19.42 feet	August 28, 2018
15.78 feet	June 8, 2008
15.16 feet	July 21, 2017
14.92 feet	July 1, 1978
14.17 feet	September 22, 2016
13.67 feet	February 9, 1966
13.06 feet	July 20, 2019
12.84 feet	August 19, 2007
12.70 feet	March 27, 1961
12.69 feet	June 17, 1984
12.62 feet	August 14, 2010
12.35 feet	April 4, 1956
12.34 feet	June 16, 1967
12.32 feet	July 21, 1951
12.03 feet	January 6, 1946
11.87 feet	April 4, 1981
11.80 feet	February 20, 1994
11.62 feet	September 21, 1983

11.51 feet	June 18, 1996
11.47 feet	September 16, 1992
11.14 feet	May 3, 1993
10.28 feet	June 2, 2000

Kickapoo Valley Flood Control Project (1962)

More than 60 years of recorded flooding led to the creation of the Kickapoo Valley Flood Control Project and ultimately the Kickapoo Valley Reserve. There is an extensive history regarding the controlling of flood waters on the Kickapoo River. It was controversial from the beginning and it has a colorful history.

1930
A dam was proposed as a method of flood control near the Village of La Farge. Then, the flood of 1935 caught the attention of Congressman Gardner Withrow. He and other representatives from La Farge headed to Washington, D.C. to appeal to Congress to get help for flood control.

1936
Congress passed the Flood Control Act authorizing the US Army Corps of Engineers to study the Kickapoo River and its flooding issues. This was followed by a public hearing in 1937 to discuss flood control with the US Army Corps of Engineers and a dam was proposed north of the Village of La Farge. World War II hit and the dam was delayed.

1951
After 8 inches of rain fell during the last week of July, floodwaters tore through Crawford, Richland and Vernon counties as the Kickapoo emptied into the Wisconsin River, killing 10 people.

1962
Congress authorizes the US Army Corps of Engineers to build a flood control dam and a 400-800 acre reservoir in La Farge – the ***Kickapoo Valley Flood Control Project***. Five years later the Corps revealed a new plan for a 1,780-acre lake with additional recreational area and hydroelectric production. Acquisition of land began in 1969 with a total of 8,569 acres on 140 farms purchased, and by 1975 only 39% of the dam structures were complete, a five –story control tower stood on the valley floor and the state highway from La Farge to Rockton (STH 131) has been relocated all at an approximate cost of $18M. The project hit a stumbling block and had to be stopped for further study.

1978
While on hold, a major flood ripped through the Kickapoo Valley in July causing major damage. This flood triggered Soldiers Grove to relocate out of the floodplain.

1992
Major government involvement from the Governor's office to state representatives to Congress happened as deals are being made to continue the project or further the study of the valley.

1996
Congress passes the Water Resources Development Act and it directed the Corps to return up to 1,200 acres of land to the Ho-Chunk Nation and the rest to the State of Wisconsin. This Act directed the management of the Kickapoo Valley Reserve for low-impact tourism and education.

2000
Finally, after agreements between Wisconsin, the Ho-Chunk Nation and the US Army Corps of Engineers, the land was transferred to the Kickapoo Valley Reserve on December 28. However, the dam project had not made any progress since 1975 and the valley still had catastrophic floods.

2004
A visitor's center was constructed, but no further improvement happened to address the flooding of the valley.

Disaster Declarations

The Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. §§ 5121-5207 (the Stafford Act) §401 stated in part that: "All requests for a declaration by the President that a major disaster exists shall be made by the Governor of the affected State." There are two types of disaster declarations – emergency declarations and major disaster declarations. Below are all the major disaster declarations that included La Farge and Vernon County in regards to flooding.

July 7, 1978 – Major Disaster Declaration (DR-559)
Authorized by the President, and administered by FEMA, freeing up public assistance and individual assistance dollars for flood recovery efforts.

September 30, 1992 – Major Disaster Declaration (DR-964)
Authorized by the President, and administered by FEMA, freeing up public assistance and individual assistance dollars for flood recovery efforts. FEMA provided $1.9M for public assistance grants and $16M for individual property and agricultural losses. The individual assistance program provided 145 applicants with $2.8M in aid.

July 24, 1998 – Major Disaster Declaration (DR-1236)
Authorized by the President and administered by FEMA freeing up public assistance and individual assistance dollars for flood recovery efforts. Public Assistance grants totaled $8.3M for 214 communities and private non-profit organization that received the awards.

June 23, 2000 – Major Disaster Declaration (DR-1332)
Under a presidential declaration and administered by FEMA, 12 counties received funding due to severe storms, straight line winds and flooding from the incident that started on May 26. In total, 30 counties received assistance – 13 counties received both public and individual assistance, 14 counties received public assistance only and 3 received only individual assistance. Vernon County received both. From May 29 to June 2, 8 to 10 inches of rain fell along a line running from southern Vernon County

through northern Richland County, with already saturated soils; the heavy rains pushed the rivers over flood stage and caused severe and widespread flooding.

May 11, 2001 – Major Disaster Declaration (DR-1369)
Authorized by the President and administered by FEMA for 32 counties. Eighteen Counties received individual and public assistance and 14 only received public assistance. Following a winter full of heavy snowfall, spring rains led to major flooding throughout Wisconsin. Wisconsin Emergency Management received 518 applications from local governments for public assistance and they distributed nearly $26M, making it the largest public assistance program to date.

June 18, 2004 – Major Disaster Declaration (DR-1526)
Authorized by the President and administered by FEMA for severe storms that started on May 19 causing massive flooding in 44 counties. This is the largest number of declared counties in one year since 1993 when 47 counties received federal aid. Early May rainfall left the soils saturated and later in the month record rainfalls in combination with those saturated soils caused major flooding. These storms continued into June causing record or near record flood peaks on rivers like the Kickapoo. Public Assistance program funds totaled $14,245,186 and were awarded to 386 communities.

August 26, 2007 – Major Disaster Declaration (DR-1719)
Authorized by the President and administered by FEMA for 14 counties in southwestern and southern Wisconsin as requested by Governor Doyle due to severe storms and flooding. Richland and Vernon Counties along with the Kickapoo Valley were affected by this event. Public Assistance Grants totaled $10.2M, individual and household assistance totaled $8.0M, with 3,027 individual assistance applications being approved.

June 14, 2008 – Major Disaster Declaration (DR-1768)
Authorized by the President and administered by FEMA for the southern half of Wisconsin as requested by Governor Doyle for 30 counties due to severe storms, tornadoes and flooding. Affected areas included Richland and Vernon Counties and the Kickapoo Valley. Total public assistance equated to $48.5M, individual and household program dollars approved was $56.7M, and total number of individual assistance applications approved was 23,956. La Farge received $1,195,674 in project grant dollars for acquisition and demolition of substantially damaged and uninhabitable properties but only utilized $761,477. Fourteen (14) substantial damaged structures qualified for the hazard mitigation program for acquisition and demolition.

August 8, 2013 – Major Disaster Declaration (DR-4141)
Authorized by the President and administered by FEMA for June 2013 severe storms, flooding and mudslides. Governor Walker made the request on August 1, 2013 on behalf of eleven counties and one Tribe including Richland, Vernon and the Kickapoo Valley. Public Assistance grants obligated was in excess of $5.9M, and Vernon County received $606,410.

October 20, 2016 – Major Disaster Declaration (DR-4288)
Authorized by the President and administered by FEMA for Richland and Vernon Counties and the Kickapoo Valley freeing up $8.8M in public assistance grants. Governor Walker requested the assistance for twelve counties in the western half of Wisconsin, on October 11, 2016, due to severe storms, flooding and mudslides.

October 7, 2017 – Major Disaster Declaration (DR-4343)
Authorized by the President and administered by FEMA at the request of Governor Walker, dated August 23, 2017, for flooding, landslides and mud slides for 11 counties in the driftless area, including Richland and Vernon Counties and the entire Kickapoo Valley. FEMA obligated $8.9M in public assistant grant dollars to this area of Wisconsin. A total of eleven counties were affected.

October 18, 2018 – Major Disaster Declaration (DR-4402)
Authorized by the President and administered by FEMA at the request of Governor Walker on October 5, 2018 when he sent a letter to President Trump requesting a federal disaster declaration for 17 counties following the flooding of August. FEMA responded with a Major Disaster Declaration freeing up funds for individual and public assistance. FEMA allocated $8.9M for individual and household programs, and $21.3M for public assistance grants and a total of 2,040 individual assistance applications were approved. Richland and Vernon Counties along with the entire Kickapoo Valley were included in this declaration.

Public Funding Assistance & Buyouts

FEMA Public Assistance
For the 2018 flood and previous flood events the community received money from a variety of sources for flood recovery and mitigation efforts. The community received funds for lift station damage and sanitary sewer repair and relocation.

FEMA Individual Assistance
FEMA provided individual assistance in the form of Housing Assistance and Other Needs Assistance for members of the community in both 2008 and 2018. At least 9 households in 2018 received assistance and at least 14 in 2008.

Acquisition/Relocation - Buyouts
Records show at least nine structures were substantially damaged (over 50% EAV) after the 2018 flood and 14 structures from the 2008 flood. Substantial damage in Wisconsin is cumulative over the life of a structure.

The community applied for and received FEMA Hazard Mitigation Grant Program dollars, the Department of Administration CDBG-Emergency Assistance Program money along with the CDBG-Disaster Recovery program, and the Department of Natural Resources Municipal Flood Control Grant.

Table 3.2-D: Public Funding Assistance & Buyouts

Lift Station & Sanitary Sewer Repair/Relocate	$739,550
FEMA – HMGP	
2008 – Acq. & Dem. – 14 structures	$761,477
2018 – Acq. & Dem. – 9 structures	$640,247
TOTAL:	**$1,401,724**

CDBG-EAP	
Housing Rehab, Acq. & Dem. (2008)	$523,000
TOTAL:	**$523,000**
FEMA – HMGP	
2008 – Acq. & Dem. – 14 structures	$761,477
2018 – Acq. & Dem. – 9 structures	$640,247
TOTAL:	**$1,401,724**
DNR – Municipal Flood Control Grant	
Acq. & Dem. of 5 structures – 2010	$160,755
Elevation of structure – 2010	$53,900
TOTAL:	**$214,655**

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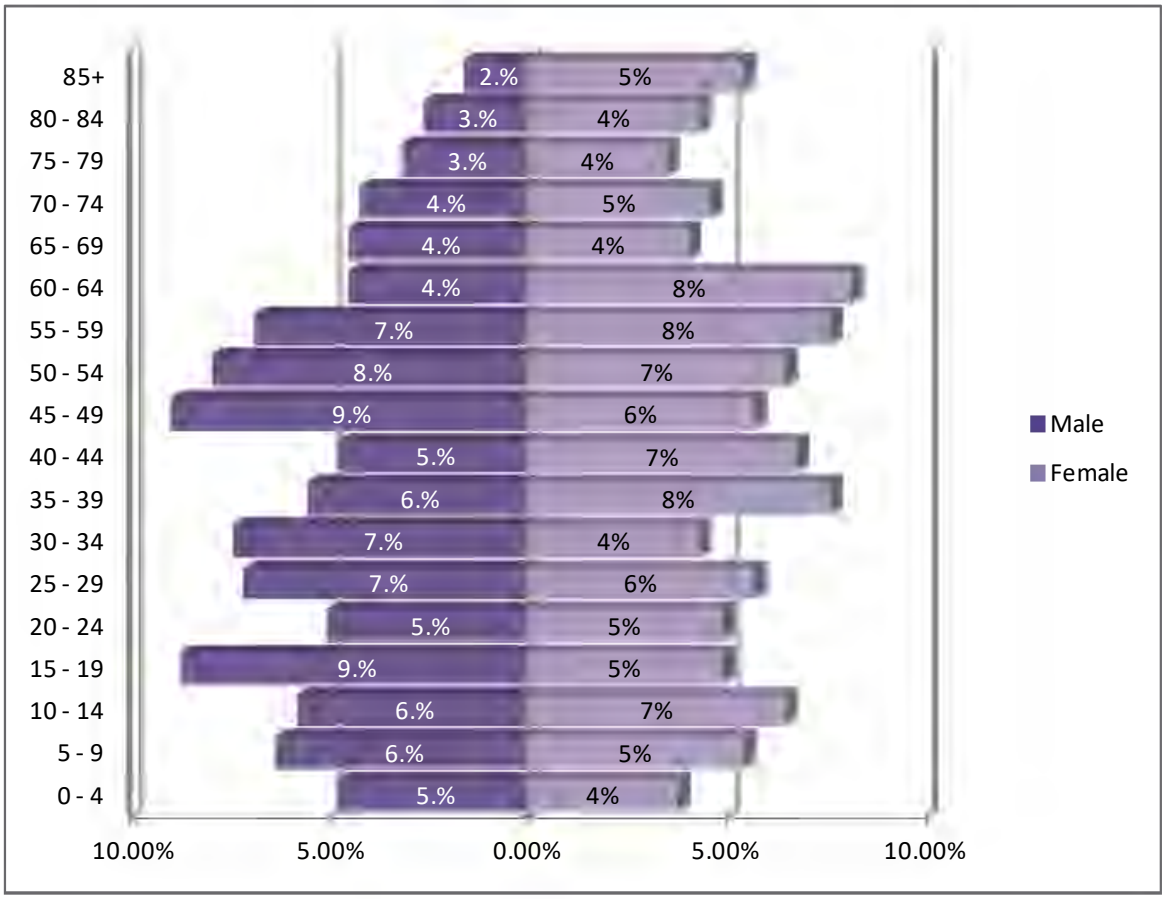
4.0 Existing Conditions

4.1 Economic & Residential Impacts

Population

In 2019 the La Farge population was 757. In 2010, the population was 746. The 2019 population estimate shows a slight gain in population from 2010. The 2024 population estimates indicate a slight increase to 767 residents. The median age of La Farge residents is 45.4. Figure 4.1-A displays the population pyramid for the Village. There are 368 females and 358 males in the village. The majority of residents are between the ages of 45 and 60. Males between the ages of 45 and 49; and between the ages of 15 and 19, comprise the highest percentage of the population. This pyramid indicates that slight growth is expected. However, the younger age categories show a decrease over time.

Figure 4.1-A: Population Pyramid of Village



Tax Base

The Village of La Farge is governed by a President and Board of Trustees, with limited paid staff consisting of a public works employee, and a full time Clerk-Treasurer. La Farge has no dedicated resources for planning or community development; but the community is located within the region covered by the Mississippi River Regional Planning Commission (MRRPC). The major sources of income for the Village are generated through taxes, intergovernmental revenue, and public services. The Village has a general property tax base of 163,676, which has increased since 2012 ($132,855) but not as high as in 2014 ($191,157). The current debt is $124,232. The mill rate has dropped to 6.39 from 6.5 in 2015.

Utility Customer Base

The last five years of the La Farge Municipal Water and Electric Utility Annual Reports show a decrease in the utility customer base for water and electric. Table 4.1-A shows the number of water utility customers by type. In 2015, the Village had 370 water utility customers. However, through the years the Village lost six residential water utility customers and four commercial water utility customers. In 2019, there was a total of 362 water utility customers.

Table 4.1-A: Water Utility Customers by Type

Water Utility	2019	2018	2017	2016	2015
Residential	311	311	311	322	317
Commercial	47	47	47	48	51
Public Authority	4	3	2	3	2
Total	362	361	360	373	370

Table 4.1-B shows the number of electric utility customers. Through the last five years, the electric utility lost and gained customers with a total loss of 53 customers by the end of 2019.

Table 4.1-B: Electric Utility Customers by Type

Electric Utility	2019	2018	2017	2016	2015
Residential	441	546	548	474	462
Commercial	111	116	114	111	114
Public Authority	8	8	8	37	37
Total	560	670	670	622	613

Economic Impacts

In 2008, 14 structures were damaged by flooding and in 2018, 22 businesses were damaged by flooding. Seven structures were damaged 10% to 30%, 12 businesses were damaged 70% to 80%, and three business structures were 100% damaged for a total of more than 2.2 million. The 2018 flood covered about a third of the Village. The Village power plant was damaged and the Village was without power for days.

Nuzum's which has been in the community for over 30 years closed in 2020. Nuzum's property is close to the Kickapoo River, thus this property has high potential for flooding unless solutions are put in place to prevent the Main Street from flooding.
Organic Valley store on Main Street had four feet of water in their building. Instead of relocating, Organic Valley invested in flood proofing the building. Brozie's, a restaurant that had opened shortly before the flood was starting to make good business, but the flood impacted the business and it did not reopen.

There are vacant buildings on Main Street, but it is difficult to get new businesses to move-in because of the past flooding events. Businesses do not want to take a chance in losing their business. There are also vacant lots on Main Street, but no one wants to build because of the flooding potential.

South of Main Street is not viable for business expansion because of the flood waters and wetlands. The Village has limited space to expand for commercial or residential.

Residential Impacts

The ACS reports that there were 371 housing units in 2018, which is more than the 332 housing units in 2010. In 2018, 351 homes were occupied with 20 vacant housing units with a homeowner vacancy rate of 5.4 and a renter vacancy rate of zero (0). A healthy vacancy rate is 5% for owner-occupied and for renter-occupied units. 239 homes were owner-occupied and 112 homes were renter-occupied. Currently there are no homes available for rent and the vacancy rate is zero. The Village should work to increase the number of rental units. The Village would need about five to six more rental units just to have a healthy vacancy rate, but that does not take into consideration families looking for rental units.

In 2018, 36 homes were impacted by the floods. Seventeen homes were damaged 5% to 30%, five homes were damaged 40% to 50%, and 14 homes were 100% damaged. Thus, the loss of residences created additional pressure on housing in the Village. Families that want to stay in the village do not have options to move within the village. Furthermore, individuals that want to move to La Farge do not have any options for housing.

The Village will need to provide opportunities for the 14 homes that were lost. In addition, the Village will need to aim to develop rental housing to have a 5% rental vacancy.

4.2 Business Environment

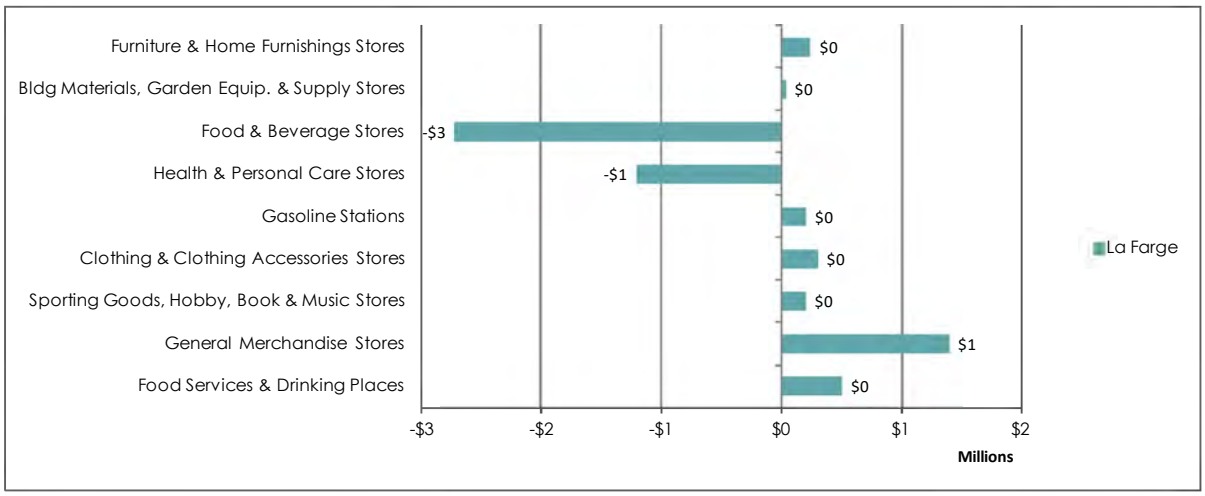
According to the U.S. Census Bureau, Center for Economic Studies, in 2013, the Village had 297 employees working in the Village, and by 2017 398 employees were working in the Village. The number of commuters has increased from 283 in 2013 to 380 in 2017. However, this information is not available after 2017 because of the data has not been released yet.

Table 4.2-A: Employment within the Village

A	Total Jobs in the Village	Employed & Living in the Village	Employed in the Village but live outside	Living in the Village but work outside the Village
2017	398	18	380	248
2016	281	14	267	201
2015	283	11	272	203
2014	341	25	316	446
2013	297	14	283	335

According to ESRI, a leader in data analytics, the Retail Marketplace Profile shows that in every Industry Subsector and almost every Industry Group there is Leakage. This data presents a snapshot of retail opportunity which is the measure of supply and demand in the community. A positive retail value represents 'leakage' of retail opportunity outside the village. A negative value represents a surplus of retail sales, a market where customers are drawn in from outside the village. Only two Industry groups showed a negative value: Food and Beverage Stores and Health and Personal Care Stores.

Figure 4.2-A: Retail Marketplace Profile



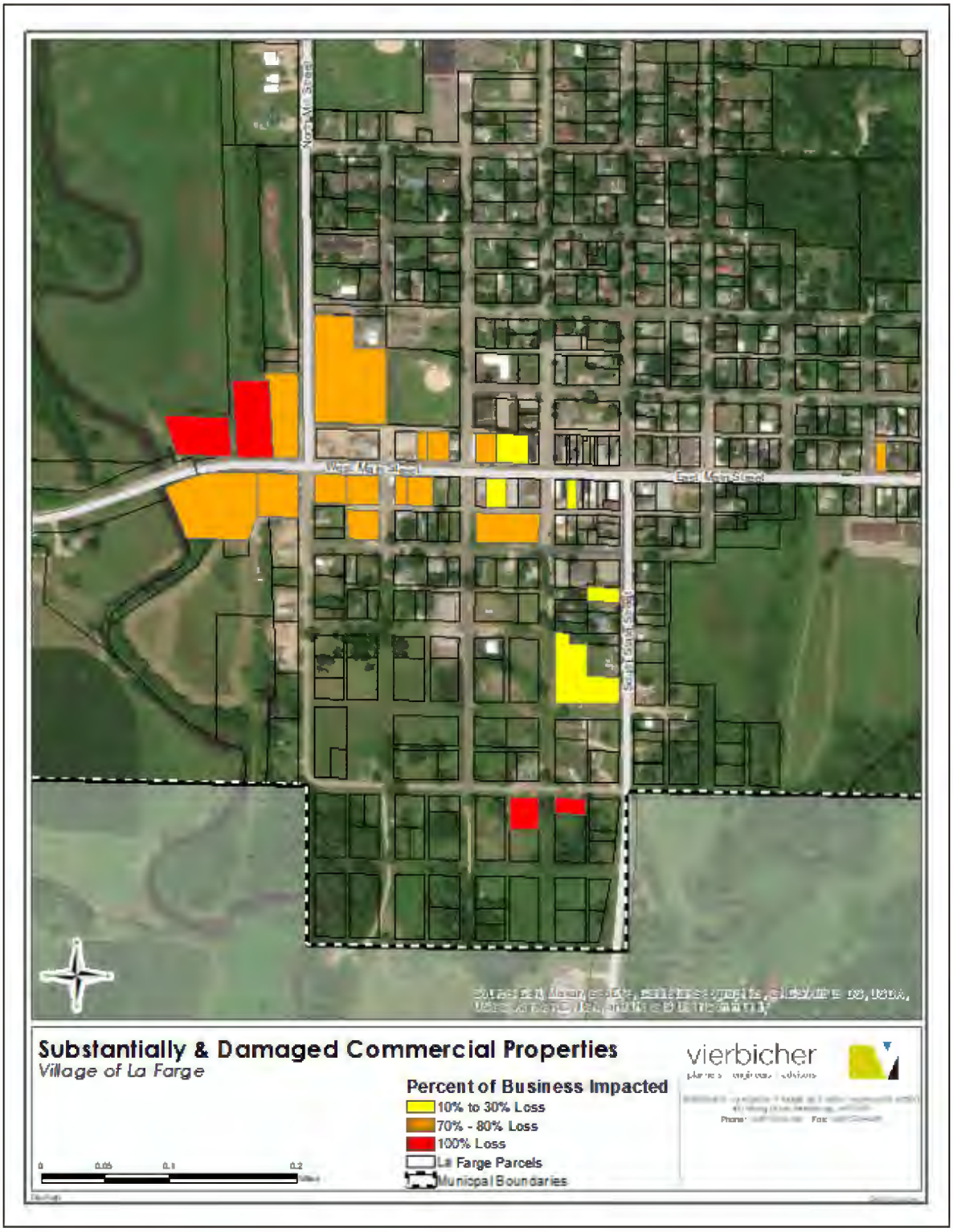
Four industry groups stand out as potential businesses for La Farge. The following list shows those four industry groups and their corresponding retail gap:

1. Restaurants
2. General Merchandise Store
3. Gasoline Stations
4. Building Supply Stores

4.3 Businesses Substantially Damaged & Impacted

There are 22 businesses affected by the flooding in the Village of La Farge. Of those, 3 are a total loss by value, 12 are considered substantially damaged, and seven were damaged. The total value of 100% loss is $25,900. Those substantially damaged had a loss of $516,520, which is 77.33% of the assessed value of the 12 properties in that category.

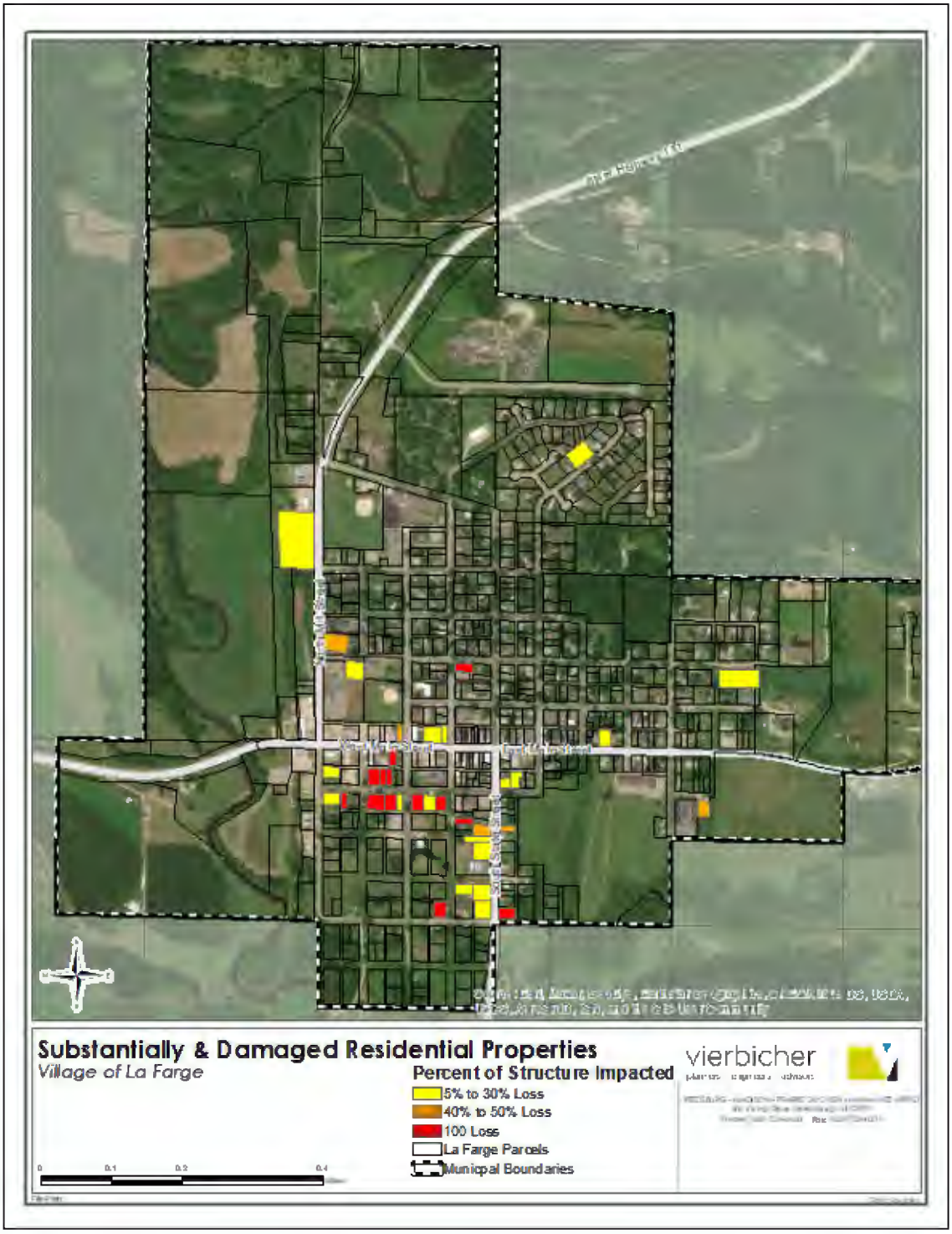
Figure 4.3-A: Businesses Substantially Damaged & Impacted



4.4 Residential Substantially Damaged & Impacted

There are 36 residences affected by the flooding in the Village of La Farge. Of those, 14 are a total loss by value, six are considered substantially damaged, and 15 were damaged.

Figure 4.4-A: Residences Substantially Damaged & Impacted

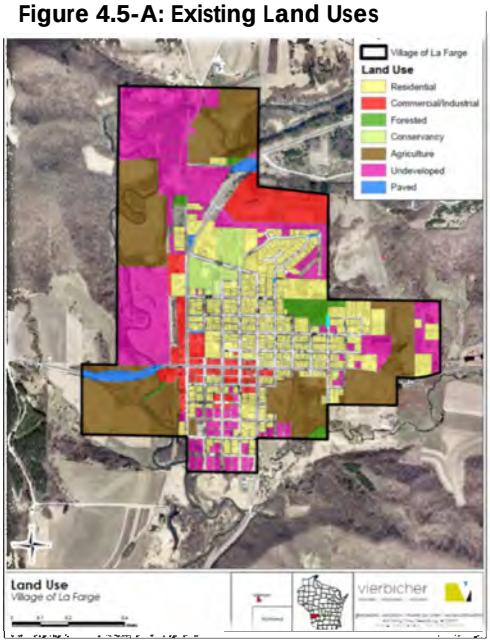


4.5 Land Use Assessment

Existing Land Uses

The Village of La Farge is located in Vernon County along the Kickapoo River. The community is broken down into seven land use categories. The four main land uses within the 1.03 square miles of the Village are, Residential, Undeveloped, Agriculture and Commercial/Industrial. Most of the undeveloped and agricultural land is also floodplain and/or wetland. The main commercial area of La Farge is located at the intersection of State Highway 82 and State Highway 131. Some of the commercial properties are located within the mapped floodplain and are looking at moving to higher ground.

Figure 4.5-A: Existing Land Uses



Change in Land Use (due to buy-outs)

Historic flooding has changed the Village in many ways. There are potentially nine buy-outs of substantially damaged properties from the latest floods. Eight of those potential buy-outs may be residential and one may be commercial. The loss of housing means a decline in the population, a decline in households, a decline in the tax base, a decline in utility customers and a decline in students for the school. The impact is far reaching. A relocation of the houses out of the floodplain to a more suitable location is an important step in the flood recovery. Commercial businesses were affected as well and are planning on locating outside the floodplain, but remaining in the central business district.

The Village is planning on utilizing approximately 3 acres of land for development along State Highway 131 while converting less than 1 acre, at the intersection of Hwy 131 and Hwy 82 into a gateway park. The other properties slated for buy-out will become vacant land. Additional land within the central business district will be utilized for retail.

Public-Private Ownership

The Village of La Farge parcel map shows the breakdown in public versus private ownership of land. Public ownership is defined as Village, County and State property and makes up approximately 109 acres. The majority of lands within the boundaries of the Village are in private ownership and makes up approximately 854 acres.

4.6 Land Suitability Assessment

In order to determine the best suitable land for development, a variety of maps and GIS layers need to be analyzed. For this project; soils, surface water and wetlands, topography, and floodplain maps were created and overlaid to represent the most suitable land for development. A quantitative analysis method was used by converting the map data into numbers with the higher the number the more suitable the feature is. Thus a composite map could be produced representing the most suitable land for development.

The main land uses within the Village are Residential, Agricultural, Undeveloped and Commercial/Industrial. The majority of the undeveloped land is within the floodplain or steep slopes. The main commercial area of the Village is located along W. Main Street between N. Mill Street and S. State Street. This is the area where the two state highways intersect. A portion of the commercial district is located in the mapped floodplain.

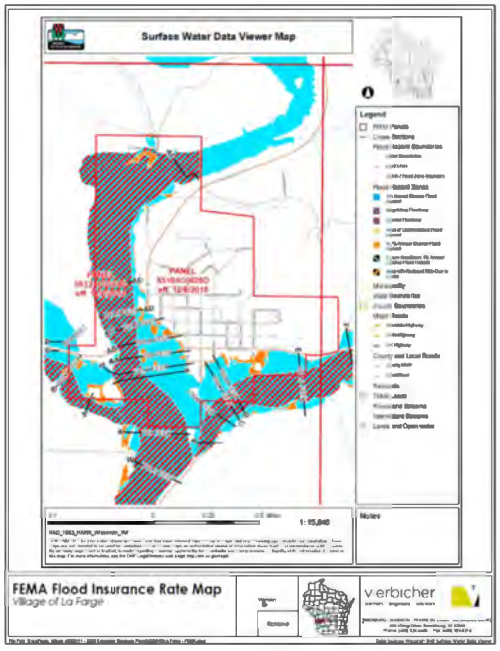
Soils

As part of the driftless area, the soils are very diverse in and around La Farge as they have remained here for hundreds of thousands of years. The soils range from very poorly drained to well drained, and from no flooding to occasional flooding. The Ettrick, Palms Muck and Orion soils are those that frequently flood and that follow the river. The suitable soils are those that are well drained or somewhat well drained and that do not flood.

Surface Water & Wetlands

The Kickapoo River runs from north to south through the Village of La Farge. The river is the primary surface water source in the community. The mapped floodplain contains numerous wetlands, and wetlands are a barrier to development. There are no lakes in La Farge.

Figure 4.6-A: Surface Water



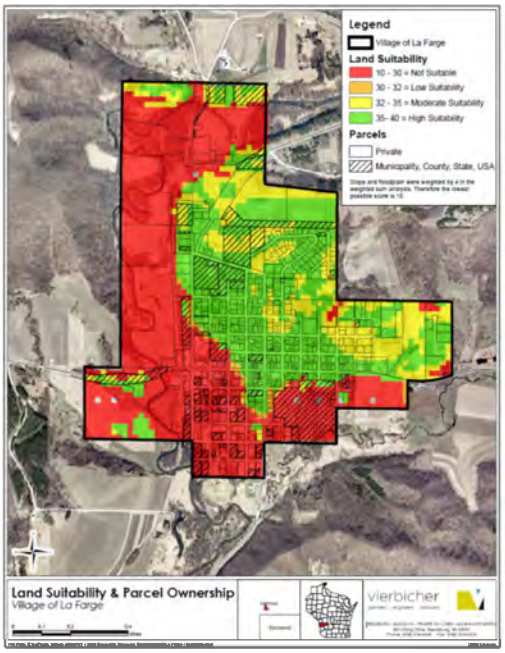
Floodplain

The floodplain runs primarily along the western edge and the southern portion of the Village. It cuts off access to or coming from the west, as well as access to the south. This makes it difficult to get emergency vehicles out of the community in response to emergencies.

Topography

The Village of La Farge sits in the Kickapoo River valley and is relatively flat (less than 10% slope). However, the surrounding coulees and ridges make for dramatic topographic features.

Figure 4.6-B: Soil Suitability



Suitable Development Areas

When combining all the land use data into one map, it produces suitable areas for development. The best areas for development are represented in green, and next best are those in yellow on the map. The red areas are not suitable for development because of floodplain, slopes and soils.

4.7 Infrastructure Assessment

Streets & Sidewalks

Streets

The Village streets are primarily made up of asphalt pavement surfaces. A majority of the streets have a rural section with limited ditches and no curb & gutter. The Transportation Information Center of the University of Wisconsin – Madison has developed a Pavement Surface Evaluation and Rating (PASER) system to assist municipalities with rating pavement conditions and setting priorities for maintenance and repairs. The Village is required to complete PASER inspections every other year to qualify for state funding. These occur in odd numbered years. For the PASER ratings, there are corresponding recommended maintenance and repair measures that can be done to improve the conditions of the Village's roads. The resulting PASER ratings and the corresponding recommended maintenance and repair measures are shown in Table 4.7-A Village of La Farge Year 2019 Pavement Surface Evaluation and Ratings in the Appendix.

Many of the Village's asphalt roads are in good condition. The Wisconsin Department of Transportation (WisDOT) is planning to reconstruct Main Street (STH 82) from Mill Street to Maple Street in 2024 or 2025. The scope of the WisDOT project includes a mill and overlay of the center 34 feet (center driving lanes plus 10-foot bike lines on each side). With this, the Village has the opportunity to improve the outer parking lanes, adjacent sidewalk, and remainder of the right-of-way. With this, all underground facilities should be evaluated and upgraded as needed prior to any of the planned WisDOT improvement.

Street Repair and Maintenance Options

Asphalt Roads:
Pulverize & Overlay is repair work that includes pulverizing the existing asphalt pavement, proof-rolling with a loaded dump truck to find soft subgrade locations, excavation of soft subgrade and replacement with granular material, reshaping of the pulverized base and hauling off excess pulverized material, and repaving with a binder and surface course of asphaltic pavement. This repair method is recommended for streets with a PASER surface rating less than 5[1], and, in some cases, may be advisable for streets with a PASER rating of 5.

Seal Coating is a preventative maintenance measure for existing asphalt pavements in good condition. A seal coat, or often called "chip seal" is composed of an application of asphalt sprayed onto the existing pavement and then a layer of uniform sized aggregate. The asphalt seals the existing pavement surface while the aggregate carries traffic. Seal coating can extend the life of the pavement another five to eight years[2]. This

[1] PASER Manual – Asphalt Roads. 2013. Transportation Information Center, University of Wisconsin-Madison.

[2] Wisconsin Transportation Bulletin No. 10 – Seal Coating and Other Asphalt Surface Treatments. 1992. Transportation Information Center, University of Wisconsin-Madison.

[3] PASER Manual – Gravel Roads. 2015. Transportation Information Center, University of Wisconsin-Madison.

method of maintenance is recommended for streets with a PASER surface rating of 5 and 6[1], pulverize and overlay may be warranted in some cases for pavement with a rating of 5.

Crack Filling is a routine maintenance measure that seals cracks which are more than ¼" wide with rubberized asphalt. Sealing cracks prevents moisture from entering the asphalt and reduces the rate of deterioration. This method of maintenance is recommended for streets with a PASER surface rating of 6 and 7[1].

Gravel Roads:

Reconstruction of Gravel Road is the complete reconstruction of the gravel road when travel is difficult or restricted due to the deep ruts, potholes, and complete failure. This maintenance includes the complete rebuilding of the road. This method is recommended for gravel streets with a PASER surface rating of 1[3].

Regrading and Drainage Improvement is a more rigorous preventative maintenance for gravel roads that have adequate drainage and the crown is present on more than 50% of the roadway. This maintenance includes spot replacement, gravel regarding and ditch cleaning and/or the addition of water diversion structures to improve the gravel road. This method is recommended for streets with a PASER surface rating of a 3. More gravel and major drainage improvements would be required for a street with a PASER rating of 2[3].

Routine Maintenance is a preventative measure for existing gravel roads in good condition. The condition of the road would demonstrate minor traffic effects washboarding, and loose gravel. The routine maintenance would address the crown, ditches, and gravel layer. This method is recommended for streets with a PASER surface rating of 4, and in some cases, may be advisable for streets with a PASER rating of 5[3].

Sidewalks

Concrete sidewalks run along both sides of Main Street from the Kickapoo River bridge to Maple Street and along the north side of Main Street from Maple Street to Cherry Street. Sidewalk is present on the east side of N. Silver Street from the school down to Penn Street. State Street also has sidewalks along most of its length, although not always on both sides of the street. Sidewalks are absent throughout much of the rest of the Village. There are sporadic locations where sidewalks are present (mainly extending from Main Street). Sidewalks don't always extend to the cross street and stop midblock.

Recommendations to Address Sidewalks

Develop an Annual Sidewalks Replacement & Maintenance Program: It is recommended that the Village develop a plan to determine where sidewalks are desired and develop a program to annually evaluate the sidewalks. This program would look similar to the PASER system that is used to annually assess the Village's roads. The Sidewalk Replacement & Maintenance program would look at individual sidewalk sections and rate them based on their condition. With the rating, the sidewalks would be given a recommendation for the type of maintenance (mud jacking, edge grinding & full replacement) and a recommended completion date.

Wastewater Collection & Treatment

Wastewater Collection System

The Village's wastewater collection system map can be found on Figure 4.7-A Village of La Farge – Sanitary Sewer Map in the Appendix. The Village's wastewater collection system consists of gravity sewers, manholes, three lift stations and their force mains. Most of the collection system consists of 8-inch gravity sewer pipes, with a section of 6-inch, 10-inch and a section of 12-inch. The three lift stations pump through 6-inch and 8-inch force mains. The following areas of the collection system are served the lift stations:

- Oak Drive Lift Station (6-inch force main): Northeast
- Cherry Street Lift Station (6-inch force main): Southeast
- Silver Street Lift Station (8-inch and a 6-inch force main): Entire Village

All of the Village sewage eventually goes to the Silver Street Lift Station where the wastewater is pumped and discharged into the Wastewater Treatment Facility (WWTF). In 1993, the Village completed major water main and sanitary sewer improvements with the reconstruction of nearly 3,200 feet of infrastructure within the Village. Sanitary sewer improvements included the following sections in the downtown area:

- Penn Street from State Street to Elm Street: 405 ft of 8-inch PVC
- Main Street from Oak Street to 270 ft east of Cherry Street: 530 ft of 8-inch PVC
- Snow Street from Cherry to 260 ft east: 260 ft of 8-inch PVC
- Maple Street from Main Street to North Street: 1261 ft of 8-inch PVC
- Cherry Street from Main Street to 185 ft south of Snow Street: 515 ft of 8-inch PVC

Very few improvements have been made to the Village's wastewater collection system on the southeast and central part of the village.

The Village had sanitary sewer televising completed in March of this year. The televising was completed for the following areas in anticipation of the upcoming WisDOT improvement:

- Main Street (from Silver Street to 260 ft east of Cherry Street)
- Mill Street (from 330 ft north of Main Street to Snow Street).

The televising along Main Street showed a total of 24 deficiencies in the 12-inch, clay gravity sewer. The deficiencies include sags, spots of infiltration, cracks, missing pipe material, and broken laterals. Some the sections of clay pipe have been repaired with PVC, however, much of it remains in poor condition.

The televising on Mill Street north of Main Street showed no major deficiencies. The section south of Main Street does have multiple cracks and missing pieces of pipe.

Evaluation of Infiltration and Inflow

The magnitude of the infiltration and inflow (I/I) into the collection system can be predicted by comparing the influent flow received at the WWTF to the average daily water sales. Table 4.7-B below compares the flows received at the WWTF to the average daily water sales as reported by the Village to the Wisconsin Public Service Commission

(WPSC) over the last three years. The WWTF influent flow is more than four times the average daily water sales, indicating a very high amount of Infiltration and Inflow (I/I) into the collection system. It is likely that much of the I/I is occurring in the areas where the sanitary sewer is old and in need of replacement, such as the clay pipe along Main Street. High I/I was noted in the 2017, 2018 and 2019 CMAR reports. For 2017, it was noted that I/I was high due to high rain volume. The same issue was reported for 2018 and that flood waters caused pipe failure on private sewers on South Mill Street. I/I was also noted as significant in 2019, due to high rain volumes that were approximately 10 inches higher than the average rainfall.

Table 4.7-B Average Daily Water Sales Compared to WWTF Average Daily Influent Flow

Year	Average Daily Water Sales (gpd)	WWTF Average Daily Influent Flow (Flow from the Collection System) (gpd)	Magnitude of Infiltration and Inflow (I/I)
2017	36,945	151,400	4.1
2018	36,592	178,375	4.9
2019	35,915	193,475	5.6

Recommendations to address Collection System:

1. Upgrade Old Sanitary Sewer and Flood Proof Structures: It is recommended that the Village upgrade the old and deteriorating pipes and structures within the collection system. Additional sanitary sewer televising sewer will assist in determining the conditions of the system and help with the prioritization of the upgrades to the system. The design of the collection system upgrades within the WisDOT improvement limits of Main Street are underway.

2. Flood Proof Wastewater Collection System near the Kickapoo River: It is recommended that additional measures be taken to flood proof the portion of the collection system that is within the floodplain. This would include installing sealed bolt down manhole covers.

   A detailed Engineer's Opinion of Probable Cost can be found in the Appendix.

Oak Drive Lift Station:

The Oak Drive Lift Station is located on the northeast side of the Village. This lift station serves five residential homes on Oak Drive and Elm Drive. The wastewater from this area is pumped from the lift station in to the collection system that eventually drains to the Silver Street lift station.

The lift station has a fiberglass wet well and integral valve vault structure with aluminum cover and hatches. The wet well and valve vault are both vented. The wet well has two submersible pumps on a lift rail system for removal. The pumping capacity of the submersible pumps is 90 gpm. Each pump discharge pipe includes a check valve and plug valve in the valve vault. The controls include a run time meter, running and failure

lamps and a hand-off-auto switch for each of the two pumps. The station appeared to be well maintained and in good operating condition.
The station has a local alarm light and horn on the exterior and an auto-dialer for alarm conveyance. There is an emergency electrical generator receptacle on the exterior of the control panel and interlocked circuit breakers to manual switch between electrical power from the utility company or a portable generator.

The lift station pumps appear to average around 6 minutes of runtime per day based on run time records for the past year. This tells us that the system is not fluctuating in the dry and winter months and the pumps are not being overrun by the wastewater that is coming to the lift station.

Cherry Street Lift Station:

The Cherry Street Lift Station is located on the southeast side of the Village. This lift station serves the residents, fire department, Methodist Church that are along Cherry Street (from Main Street to the southern end of Cherry Street) and on Main Street (from Oak Street to 270 ft to the east of Cherry Street). The wastewater from this area is pumped from the lift station to the Manhole located on the corner of Main Street and Cherry Street.

The lift station has an in-ground concrete, vented wet well and integral valve vault structure with concrete cover and aluminum hatches. The wet well has two submersible pumps on a lift rail system for removal. The pump discharge pipe for each pump includes a check valve and plug valve in the valve vault. The controls include a run time meter, running and failure lamps and a hand-off-auto switch for each of the two pumps. The station appeared to be well maintained and in good operating condition.

The station has a local alarm light and horn on the exterior and an auto-dialer for alarm conveyance. The wet well has float switches to allow for pump control. Electrical power is fed to the station from the Fire Station which is backed up by an on-site emergency electrical generator sized to power the fire station plus the lift station.

The lift station pumps appear to average around 15 minutes of runtime per day during dry months and 40 minutes per day during the wet weather months based on run time records for the past year. The run time for the wet weather months is more than double the dry months which could indicate a high volume of I/I in the collection system during wet weather.

Silver Street Lift Station:

The Silver Street Lift Station is located on the south central side of the Village. This lift station serves the entire Village; all gravity sewers and other lift stations flow to this station and pump directly to the WWTF. This lift station is within the floodplain. Floodwaters approached, but did not reach the lift station. However, access to the lift station needed a boat.

The lift station is an in-ground concrete wet well manhole and separate valve vault manhole with concrete covers and aluminum hatches. The wet well and valve vault are both vented. Currently, the wet well has two submersible chopper pumps on a lift rail system for removal. The original solids handling pumps were rated for 450 gpm at 70 feet of total dynamic head (TDH). However, these pumps were replaced with new chopper

pumps in June of 2020, and each is capable of 450 gpm at 70' of TDH. The pumps discharge pipe in the valve vault, includes a check valve and plug. The controls include a run time meter, running and failure lamps and a hand-off-auto switch for each of the two pumps. The station appeared to be well maintained and in good operating condition.

The station has a local alarm light and horn on the exterior and an auto-dialer for alarm conveyance. The wet well has a level transducer and backup float switches to allow for pump control. There is also a vertical by-pass pipe connection for a portable pump to discharge through the force main. The lift station has emergency power provided by an on-site natural gas-fired emergency generator with an automatic transfer switch.
The wet well has had rocks and concrete show up in the wet well earlier this year. This material clogged and damaged the original solids handling pumps. The original pumps were replaced with new chopper pumps on June 25, 2020. The 2018 flood waters neared the top of the lift station wet well and valve vault covers but were not overtopped.

Based on the run time records of the lift station for the past year, the lift station pumps appear to average approximately 9 hours of runtime per day during dry months and 18 hours per day during the wet weather months. The higher wet weather average run time could indicate high amounts of infiltration and inflow (I/I) in the collection system. Much of the collection system was installed prior to 1993, and so the higher wet weather flows are most likely due to a lack of water tightness of the sanitary sewers as previously discussed. The increased I/I could also be due to old, deteriorating access structures. As noted above the rocks and concrete that showed up in the lift station wet well could potentially be from old concrete structures within the collection system that are failing.

Recommendations to Address Lift Stations:

1. Provide Dryland Access to Silver Street Lift Station: It is recommended to look for an opportunity to provide dryland access to the Silver Street lift station. This may be possible from Snow Street through the South Gold Street right-of-way. A detailed Engineer's Opinion of Probable Cost can be found in the Appendix.

Wastewater Treatment Facility

General Description

The Village's WWTF is located on the south side of the Village on the east side of Monroe Street. The WWTF is an activated sludge mechanical wastewater treatment facility that serves residents and commercial users of the Village's collection system. The WWTF process consists of fine screening, grit removal, activated sludge, final clarification, seasonal chlorine disinfection, and phosphorus removal. The final effluent is discharge to the Kickapoo River.

Influent flows from the Silver Street lift station discharges through the force main and influent magnetic flow meter into the influent channel. In the influent channel, influent is sampled and an augur style mechanical screen removes solids. The screened solids are dewatered by compression and automatically deposited into a continuous plastic trash bag for disposal.

The screened sewage leaves the influent channel and flows into an aerated equalization/grit removal tank where alum is drip fed by a peristaltic pump at the front of

the tank for phosphorus removal. Centrifugal blowers provide aeration through submerged diffusers in the bottom of the tank.
The screened and aerated sewerage flows under a baffle wall and overflows a broad crested weir wall into the primary treatment tank. There are three combination surface aerator/subsurface mixers in the primary aeration treatment tank which provide aeration and mixing.

The treated sewerage flows out of the aeration tank through sluice gates into a rectangular final clarifier which utilizes chain driven horizontal sludge rakes. The clarified effluent flows into an effluent channel where chlorine is fed for disinfection. The effluent flow rate is measured by a parshall flume with ultrasonic flow meter to measure the effluent flow rate.

The disinfected effluent flows through a serpentine chlorine contact tank to allow adequate contact time with chorine for disinfection. Sodium bisulfate is fed at the end of the contact tank to de-chlorinate the effluent.
The fully treated effluent flows to a discharge manhole on top of which sets the effluent sampler, and from there the treated effluent discharges to the Kickapoo River via a gravity discharge sewer.

The sludge raked in the clarifier is sent to the sludge digester that is located in the main treatment building between the clarifier and chlorine contact tank. The digester sludge is then transferred to drying beds in a separate building. The dried sludge is disposed by land application and the liquid from the sludge is returned back to the head of the plant via underdrains. There is an above ground steel sludge storage tank that has the required 180 day capacity for winter storage.

The buildings of the WWTF include a control building, a treatment building, and a sludge drying building. The control building is concrete walled with a gable pitch shingled roof. The treatment building is wood framed with sheet metal siding. There is a chemical room with a concrete floor and masonry block walls constructed within the treatment building which houses the alum addition tanks and equipment. The alum is stored in two 260 gallon polyethylene storage tanks in the chemical room, which have containment basins built into the concrete floor. There is a drench shower and eyewash present in the chemical room. However it is not currently connected to the water supply system. The sludge drying building has a fiberglass exterior with a metal roof.

Assessment of Existing Conditions

All the equipment appeared to be well maintained and in good working order. The facility had some present issues and deficiencies that were discussed in the on site visit with the operator.

The eyewash/drench shower unit in the chemical treatment building is not functional due to not having tempered water. Due to its significant cost, the Village has not yet installed the required water heater to provide tempered water.

Recent Influent Flows & Loadings Compared to Design Flows and Loadings

According to the Compliance and Annual Maintenance Reports (CMAR's) submitted to the WDNR, the average annual design flow for the wastewater treatment facility (WWTF) is 0.172 million gallons per day (MGD) and its design BOD loading capacity is 545 lbs/day.

The CMARS submitted to the WDNR over the past three years shows that the influent flows and BOD loads received at the WWTF have been trending upward. Table 4.7-C – WWTF Influent Flows & BOD Loadings can be found in the Appendix and Figures 4.7-B and 4.7-C are shown below.

The average annual daily flow has gone from 151,400 gpd in 2017 to 178,375 gpd in 2018 and to 193,475 gpd in 2019. There have been seven months in 2019 (March, April, May, June, July, September & October) where the influent average monthly flows exceeded the maximum monthly design flow of 0.172 MGD. The average daily flow was greatest in the month of September of 2018, which corresponds to the timing of the flooding that occurred in the Village. The overall increasing trend in influent flows may be caused by an increased amount of infiltration and inflow in the wet months.
The influent BOD loads to the WWTF have been trending slightly upward over the past three years. The average annual daily BOD loading has increased from 75 lbs/day in 2017 to 93 lbs/day in 2018 and down to 82 lbs/day in 2019. The average annual BOD loading for all three years have not exceeded the design BOD loading (545 lbs/day).

Figure 4.7-B – WWTF Average Influent Flow to Design Flow

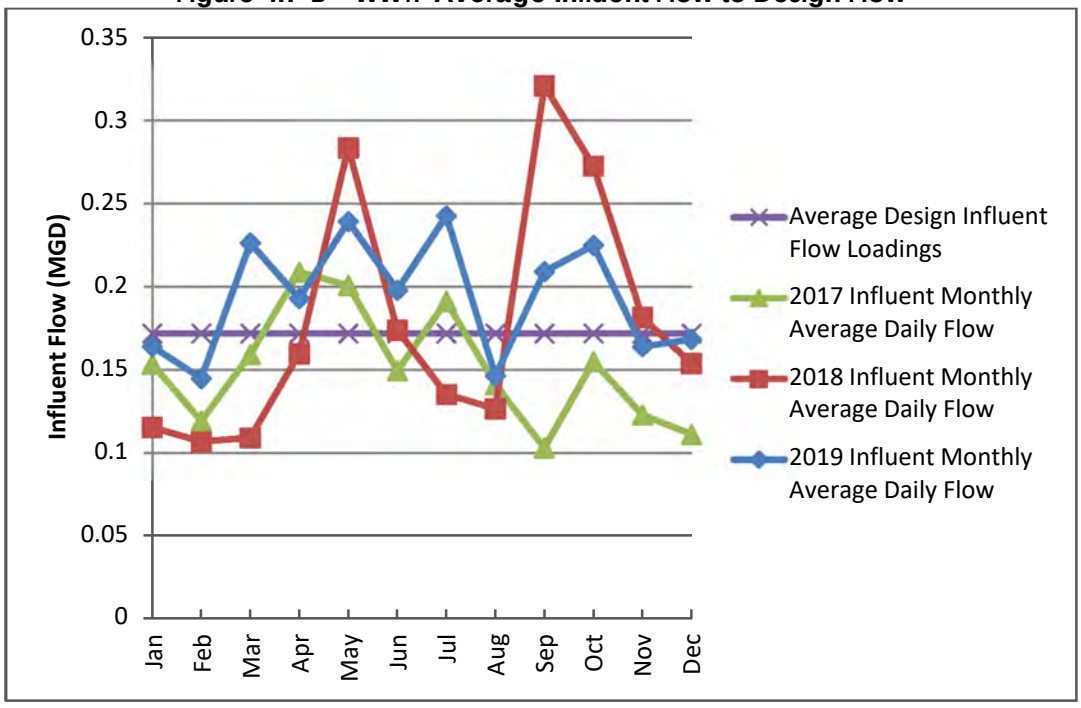
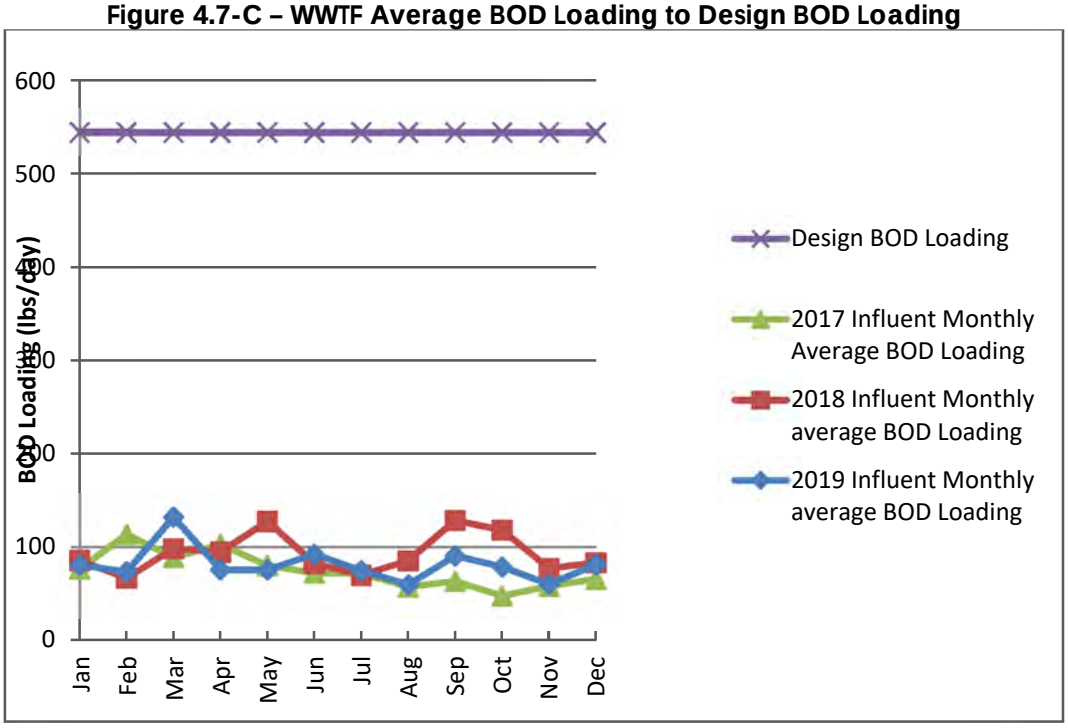


Figure 4.7-C – WWTF Average BOD Loading to Design BOD Loading



Permit Effluent Limits & Recent Effluent Concentrations

The WWTF's WPDES permit from the WDNR sets the monthly effluent limits as follows:

Table 4.8-D – WWTF WPDES Monthly Effluent Limits

Biological Oxygen Demand (BOD):	30 mg/L
Total Suspended Solids (TSS):	30 mg/L
Total Phosphorus (TP):	2.0 mg/L (until September 30, 2022) 1.0 mg/L (starting October 1, 2022)

From 2017 to 2019, the effluent limits for BOD, TSS, and TP (under the Multi-Discharge Variance (MDV)) have not been exceeded by the WWTF per the CMAR reports provided. The CMAR data showed that the WWTF is getting close to the TP permit target value of 0.2 mg/L. This is being achieved by feeding alum to the WWTF.

The WWTF effluent limit of 2.0 mg/L for TP is an interim limit effective through September 30, 2022 per the Multi-Discharge Variance (MDV) granted by the WDNR. The MDV allows the WWTF to pay $52.02 for every pound of phosphorus discharged over the target effluent limit (0.2 mg/L). The WWTF has been adding Alum for phosphorus removal since December of 2018 to meet the MDV. The reduced TP in the effluent is reflected in the reduced effluent loadings thereafter that month in the CMAR data. The cost for the effluent over the target effluent limit for the WWTF in 2019 was $2,007.45. This cost would equate to roughly 39 lbs of phosphorus that exceeded the present MDV effluent limit. The new TP limit of 1.0 mg/L under the MDV is required to be met October 1, 2022 and expires on September 30, 2023. The WWTF 2019 TP effluent data shows that the plant should be able to achieve the reduced TP effluent limit. Once the present WPDES permit expires, the WWTF will have a new WPDES permit that they will be operating under. The

new WPDES permit may require the plant to meet the reduced TP effluent limit of 0.1 mg/L, which the plant will not be able to meet with the present method of phosphorus removal.

From correspondence with WDNR, the phosphorus MDV is currently approved until 2027. It is WDNR's intention to renew the variance for years 2027 to 2037 if possible and appropriate per the approval from EPA. A facility may choose to reapply for the MDV at each permit reissuance, and it may provide up to 15 additional years before being required to meet the low-level phosphorus limit.

According to the previously completed Final Compliance Alternatives Plan for Phosphorus WQBEL Compliance (November, 2017 by MSA), there are two recommended alternatives to be considered for effluent phosphorus compliance after the MDV is no longer available. These two alternatives include a WWTF upgrade, or developing a Water Quality Trading (WQT) program. The WWTF upgrade would consist of installing a tertiary phosphorus removal process. The Final Compliance Alternatives Plan recommends a reactive sand filtration system which would include a new building to house the new equipment and a new effluent pumping station. The capital cost to construct these improvements was estimated to be $3,210,000. A WQT program would not require upgrades to the WWTF, but rather implement watershed improvement projects to offset the amount of phosphorus discharged by the WWTF in excess of the future effluent TP limit of 0.1 mg/L. A WQT program would be a more regional approach and could include agricultural Best Management Practices (BMPs) such as barnyard improvements and stream bank stabilization projects. The Final Compliance Alternatives Plan estimated a capital cost of $542,000 to implement a WQT program consisting of typical agricultural BMPs.

Flooding Impacts

The WWTF was not inundated by the 2018 flood waters. The flood waters came up to the fence at the perimeter of the WWTF, but did not enter the site or buildings.

Recommendations to Address Wastewater Treatment Facility Deficiencies:

1. Alum Feed Room Eyewash/Drench Shower Water Heater: The installation of a water heater to provide tempered water to the eyewash/drench shower as required by current OSHA regulations is recommended. An Engineer's Opinion of Probable cost for implementation of this recommendation can be found in the Appendix.

2. Collection System Improvements: This recommendation is to address the high influent inflow to the WWTF. The collection system has high I/I due to deteriorating pipes and structures. As such, making improvements to the collection system will reduce I/I and influent flow to the WWTF.

3. Meet Future TP Effluent Limits: The WWTF TP effluent limit will be reduced from 2 mg/L to 1.0 mg/L on October 1, 2022 per the WPDES permit. The WWTF can continue to operate in the same manner per the MDV agreement. However, once this permit expires the WWTF may be required to meet the TP effluent limit of 0.1 mg/L. It may be in the Village's best interest to begin looking at upgrading the WWTF to reduce effluent TP or implementing a Water Quality Trading (WQT) program. According to the previously completed Final Compliance Alternatives

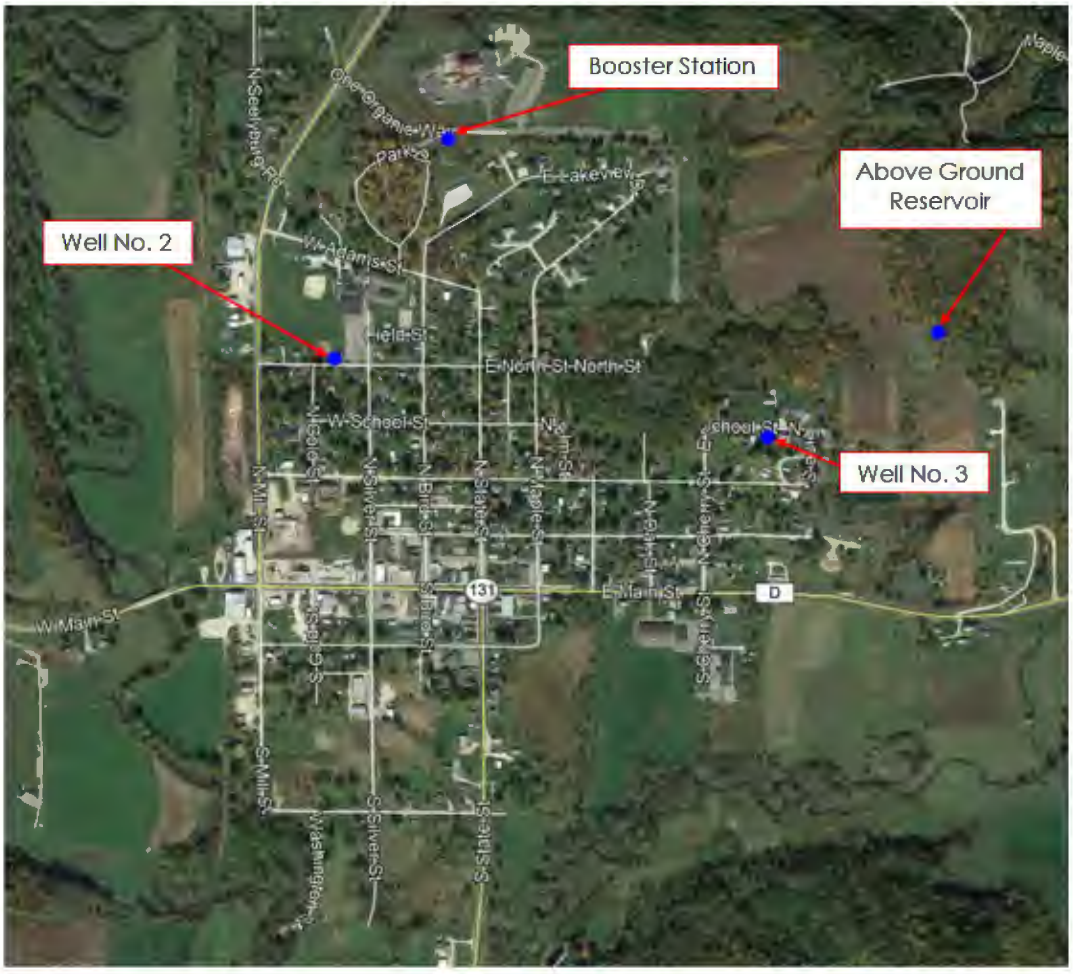
Plan for Phosphorus WQBEL Compliance (November, 2017 by MSA), adding a tertiary phosphorus removal process such as reactive sand filtration to the existing WWTF is estimated to cost $3,210,000 to construct and would have annual O&M costs in the range of $80,000. The report noted that the Village would not be able to take on such a financial burden and would have to increase user fees to a point where residents could not afford them. There may be grants and loan programs that the Village could utilize to fund the required improvements without requiring a large increase to the existing user fees. Alternatively, a WQT program including barnyard improvements and stream bank stabilization projects offsetting the amount of phosphorus discharged by the WWTF in excess of the future effluent TP limit could be implemented. The Final Compliance Alternatives Plan estimated a capital cost of $542,000 to implement a WQT program consisting of these typical agricultural BMPs.

Water Supply, Storage, and Distribution System

Existing Facilities Summary

The locations of the Village's water supply, storage and transmission facilities are shown in Figure 4.7-D below. A description of each facility follows Figure 4.7-D.

Figure 4.7-D – Village of La Farge Water Supply & Storage Facilities Map



Water Supply

The Village was previously supplied by Well No. 1 which was permanently abandoned in 1987. Currently, the Village is supplied with water from two wells; Well No. 2 and Well No. 3. These wells are 417 and 271 feet deep respectively, and have a reported pumping capacity of 375 and 240 gallons per minute (gpm) respectively as noted in the 2018 WDNR Sanitary Survey Report. Well No. 2 is located on North Street and has been in operation since being constructed in 1964. The current well pump was pulled in 2008. At that time, the well column pipe and shaft were replaced, and the pump bowls were rebuilt. The well pump was most recently pulled for inspection in 2018. Well No. 3 is located on School Street and has been in operation since being constructed in 1996. The current well pump was last pulled for inspection in 2011. Both well pumps operational status and alarms are communicated by telephone to the control panel located at Well No. 2.

In 2003, the Village installed a booster station to serve the industrial user, Organic Valley and residential users on the far north side of the Village.

Water Storage

Water storage is provided by an above ground storage reservoir on the northeast side of the Village. This steel reservoir was constructed in 1987 and has a reported capacity of 130,000 gallons at the overflow water level.

Water Distribution System

The Village's water distribution system map can be found on Figure 4.8-E Village of La Farge – Watermain Map in the Appendix. The Village's distribution system includes 2-inch to 12-inch diameter piping. Table 4.7-E below shows the lengths of each size of main as reported by the Village to the Wisconsin Public Service Commission in 2019. There is a main trunk line of 8" water main starting from the northwest side of the Village and running along the central part of the Village to the south end of the Village. This 8-inch trunk line connects wells to the reservoir. The 8-inch trunk line also connects the system to the booster station on the north end of the Village. On the west side of the booster station, a 12-inch supply main extends south to the 8-inch water main on the west end of Lake View Drive. And on the east side of the booster station, a 10-inch water main extends from the station to the reservoir. The 2-inch water main supplies the Village Park on the far west side.

Table 4.7-E – Water Distribution Piping Summary Table

Diameter (inches)	**Pipe Material**	**Length** (feet)	**Percent of System**
2	Other Metal	100	0.3%
4	Other Metal	353	0.9%
6	Other Metal	20,701	53.4%
8	Other Metal	11,741	30.3%
10	Other Metal	5,167	13.3%
12	Other Metal	697	2.0%
Total Municipality		38,759	100%

Historical Water Sales

The historic water sales as reported to the Wisconsin Public Service Commission (WPSC) for the past three years are shown in Table 4.7-F and Figure 4.7-F below. The total water sales are on a slight decline over the past three years. Most of the Village's water sales have come from residential use. The Village's commercial use is roughly half of the residential use.

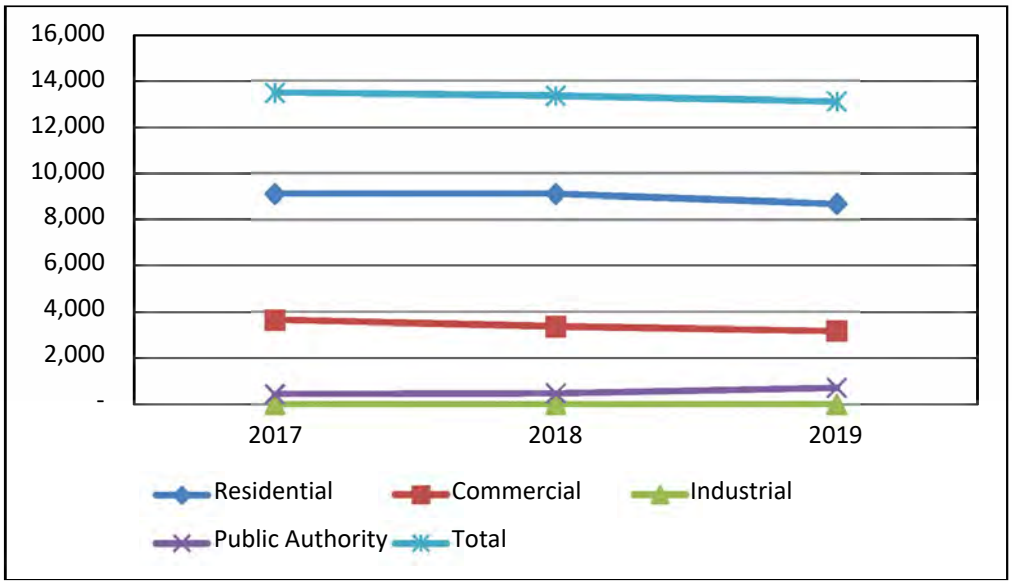
Table 4.7-F – Historical Water Sales & Estimated Peak Hour Demand

Year Customer Type	2017 (000's gallons)	2018 (000's gallons)	2019 (000's gallons)
Residential	9,108	9,102	8,682
Commercial	3,646	3,370	3,180
Industrial	-	-	-
Public Authority	436	468	709
Multifamily Residential	295	416	538
Total	13,485	13,356	13,109
Average Daily (gpd)	36,945 gpd	36,592 gpd	35,915 gpd
Maximum Day (gpd)	109,000 gpd*	146,000 gpd*	87,000 gpd*
Peak Hour (gpm)**	132 gpm **	131 gpm**	128 gpm**

* Due to watermain break.
**Peak Hour Demand is estimated at 5.14x's the Average Daily Water Sales based on the most recent year (2002) that the Maximum Day Demand occurred due to only customer demand.

It should be noted that the most recent maximum day demand due to only customer demand was reported in 2002 and was 150,000 gallons per day.

Figure 4.7-F – Historical Annual Water Sales
(000's gallons)



Historical Number of Customers

The historic number of water customers as reported to the Wisconsin Public Service Commission (WPSC) for the past three years are shown in Table 4.7-G below. The number of residential and multifamily customers has been relatively constant over time, whereas the number of commercial customers has slightly decreased but has held constant for the last two years.

Table 4.7-G – Historical Number of Customers

Customer Type	2017	2018	2019
Residential	306	305	305
Commercial	48	46	46
Industrial	0	0	0
Public Authority	6	7	7
Multifamily Residential	2	2	2
Total	362	360	360

Evaluation of Existing Water System Facilities

Based on the above water sales information presented in Table 4.7-G above, the following values will be considered the Village's current water demands and will be used to evaluate the water system facilities to meet the current water demands:

- Average Day Demand: 37,000 gpd
- Maximum Day Demand: 150,000 gpd
- Peak Hour Demand: 135 gpm

A 1,500 gpm fire flow demand available for a 2.0 hour duration is recommended and will be used to evaluate the adequacy of the existing water system. Typical recommendations for commercial areas given by the Commercial Risk Services (CRS) division of the Insurance Services Office (ISO) were considered in determining the above recommended fire flow demand.

The following Engineering Design Criteria will be used to evaluate the adequacy of the existing water system:

1. The peak hour demand should be provided by supply capacity.
2. The maximum day demand plus fire flow demand should be available from supply and storage capacity.
3. The average daily demand should be available from storage.

Water Supply Facilities

As mentioned above, currently water is supplied to the Village by two wells (Well No. 2 and No. 3) that have a pump capacity of 375 and 240 gpm respectively, which provides a total pumping capacity of 615 gpm.

Per the first engineering design criterion, the water supply facilities should be capable of meeting the peak hourly demand. The current well capacity (615 gpm) is greater than

the current peak hour demand (135 gpm). Also, the firm well capacity (largest well out of service) is 240 gpm and greater than the current peak hourly demand. Therefore, the wells have more than enough water supply capacity to meet the estimated current peak hour water demand and satisfies Engineering Design Criterion #1.

The wells are about 40 feet from the existing sanitary sewer adjacent to them. This is less than the current required minimum setback distance (200 feet) for sanitary sewer not constructed with water main class piping and pressure tested per AWWA C-600 as noted in the recent 2018 WDNR Sanitary Survey Report. Well No. 2 was constructed prior to 1992, so it is exempt from this requirement. However, Well No. 3 was constructed in 1996, and is not exempt from this requirement. It is recommended that the sanitary sewer within 200 feet of these wells be replaced with water main class pipe as part of future street reconstruction projects to provide the wells with additional protection from contamination.

The Village has been using chlorine for continuous disinfection since 1966. The chlorine is stored in 25-gallon solution containers and is measured using digital scales. The chlorine is injected into the water at the well houses by peristaltic pumps.

The Village has reasonably high levels of iron. The Iron levels are 25% to 35% above the secondary MCL as noted in the 2019 WDNR SSR. The levels above the secondary MCL's are not a health risk to consumers, rather they may have an objectionable taste and could cause staining of plumbing fixtures and washed clothing. To treat the high levels of iron, the Village previously treated the water with phosphate sequestering from 1973 to August 2015. Now the Village mitigates the aesthetic related problem with its flushing program, due to phosphorus effluent discharge limitations at the wastewater treatment facility. Also in 2019, the Village installed the addition of a blended phosphate (Hawkins LPC-AM) for corrosion control and iron and manganese treatment at both wells.

Well No. 2:

Well No. 2 was constructed in 1964 with 83.5 ft of casing. In 2008 the pump unit was pulled for maintenance, the column pipe and shaft were replaced, and the bowls were rebuilt. The current pumping capacity is 375 gpm which is less than the original pumping capacity of 400 gpm. The specific capacity (well yield) is 19 gpm per foot of drawdown and has changed little between the last two WDNR Sanitary Surveys conducted in 2015 & 2018.

The well discharge piping includes a raw water sample tap, air/vacuum release valve, check valve, phosphate injector, flow switch, flow meter, shutoff gate valve, and chlorine injector, all of which are in good condition.

The well controls include a solid state starter. The SCADA master controls are located in this well building pumphouse and include a touch screen operator interface displaying the reservoir level and well pump operational set points. There is an auto-dialer to convey alarm conditions.

The Well No. 2 building is constructed of a sheet metal exterior with concrete block walls and a gable pitched, shingled roof. It has a single room with two exterior doors. There is a roof hatch to facilitate removal of the well pump. On the north side of the building, there is a wood framed and sheet metal sided generator room with a single door, intake louver and exhaust louver. There is a chain link fence with a barb wire top and has a

pad locked gate, though there is no intrusion alarm. The building is in good condition and has not been affected by the historic floods.

The chemicals added are chlorine and a blended phosphate, which are fed by peristaltic pumps. Chorine and phosphate are stored in plastic chemical tanks with secondary containment basins. Each are measured by electronic scales with wall mounted read outs. The chemicals and their associated equipment are in the same room as the well pump and controls. There is not a separate entrance or separate ventilation system as required by the current version of Chapter NR 811, WAC. There is an eyewash/drench shower station as required by current WDNR/OSHA code. However, it does not appear that there is a water heater to provide tempered water.

Emergency operation of the well is by an on-site natural gas powered electrical generator. There is oil staining on the floor under the generator, which appeared to be from a past leak or spillage from an oil change.

Well No. 3:

Well No. 3 was constructed in 1996 with 170 ft of casing. In 2011, the pump unit was pulled for maintenance. The current pumping capacity is 240 gpm which is a little less than the original pumping capacity of 250 gpm. The specific capacity (well yield) has decreased 0.3 gpm per foot of drawdown (7.5%) since it was first constructed (4.0 to 3.7 gpm/ft). Experience indicates that if the specific capacity of a well declines by 25%, it is time to initiate rehabilitation procedures.[3] Therefore, there is no need to rehabilitate Well 3 at this time. The well discharge piping includes an air/vacuum release valve, electric pump control/check valve, raw water sample tap, phosphate injector, flow meter, shutoff gate valve, and chlorine injector. The well controls include a solid state starter. All of which are in good condition.

The Well No. 3 building has a sheet metal exterior with concrete block walls and a gable pitched shingled roof. There is a pump room and a chemical room. The pump room has one door, one window and a roof hatch to facilitate removal of the well pump. The chemical room has a separate exterior door and intake and exhaust louvers. There is a chain link fence with a barb wire top and has a pad locked gate, though there is no intrusion alarm. The building is in good condition and has not been affected by the historic floods.

The chemicals added are chlorine and a blended phosphate, which are fed by peristaltic pumps. Chorine and phosphate are stored in plastic chemical tanks with secondary containment basins. Each are measured by electronic scales with a wall mounted read outs. The chemicals and their associated equipment are in a separate room from the well pump and controls. There is a separate entrance and a separate ventilation system as required by the current version of Chapter NR 811, WAC. The ventilation system is activated by a wall switch next to the light switch. There is an eyewash station but no emergency drench shower station as required by current WDNR/OSHA code.

There is no emergency electrical generator or auxiliary engine to operate this well. The Village operator mentioned that they cannot afford the generator at this time.

[3] Driscoll, Fletcher. *Groundwater and Wells*, 2nd Edition. St. Paul: Johnson Filtration Systems, Inc., 1989. p. 630.

Booster Station:

The booster station was installed in 2003. There are four booster pumps, three of which are domestic supply and one for fire supply. All pumps have premium efficiency motors. The piping system includes shutoff butterfly valves, check valves on pump discharge pipes, a Krohne brand magnetic flow meter, and Amtrol brand hydro-pneumatic tank. There are suction and discharge pressure gauges. The controls include a touch screen operator interface displaying the booster pump operational set points.

This is a packaged booster station manufactured by Engineered Fluid Inc. (EFI) with exterior concrete panel walls, gable pitched shingled roof mounted on a steel framed base. There are two double doors and a wood framed and shingled porch over the doors. Inside, there is a painted steel floor and FRP insulated wall panels and ceiling. There is a wood framed shingled roof supported by four wood posts covering an emergency electrical generator on the east side of the building. The building has no site security fence or intrusion alarm. The building and equipment are well maintained and in good operating order and have not been affected by historic floods.
The station operates at a suction pressure of 42 psi and will not allow suction pressures to drop below 20 psi before shutting the station pumps down. Pressure is maintained by a pressure tank that operates at a hydraulic gradient of 1095 ft (92' above the reservoir max water elevation). The pumping capacity of the booster station pumps are as follows;

- Pump No. 1 - 120 gpm;
- Pump No. 2 – 200 gpm;
- Pump No. 3 – 400 gpm;
- Pump No. 4 - 1600 gpm.

There is an automatic transfer switch to start up and switch over to the natural gas powered emergency electrical generator. There is oil staining on the concrete slab under the generator, which appeared to be from a past leak or spillage from an oil change.

Water Storage Facilities

Storage is provided by a single above-ground reservoir that was constructed in 2012. It has a total capacity of 130,000 gallons at the overflow elevation of 1003 ft MSL. The water level is monitored by SCADA via a level transducer located in a manhole down slope of the tank.

Current water level settings for the tank include:

Water Level Elevation	Water Overflow Elevation	Total Volume	Low Set Point	High Set Point	Working Volume
(ft)	(USGS ft)	(gallons)	(gallons)	(gallons)	(gallons)
23	1003	130,000	104,400	121,400	17,000

The reservoir is a steel plate bolted tank on an at-grade concrete slab. The reservoir is not insulated. The exterior of the reservoir was observed from ground level. The overflow drain pipe terminates at least 12-in above the ground and has he required vandal-proof grates. There is a ladder with a fall protection cage to the roof. However, the roof was

not accessible due to a wasp's nest at the bottom of the ladder cage. Due to this, the roof top vent pipes could not be viewed and roof top hatch(es) could not be viewed. An on-site hydrant facilitates the draining, flushing and cleaning of the reservoir.

The tank, access ladder, and overflow piping appear to be in good condition with some slight surface rust on the exterior of the tank. With the reservoir being an above ground steel tank that is not insulated, there is a greater potential for freezing due to heat loss. This facility is well above the historic flood elevations.

Access to the reservoir was via a gravel road that was passable. There is a locked site gate, but there is no continuous fencing.

The second engineering design criterion requires the maximum day demand plus fire flow to be available from water supply and storage.

Maximum Day Demand:	104 gpm
Fire Flow:	+1,500 gpm
Total Well Capacity:	- 615 gpm
Rate Required from Storage:	989 gpm

Volume Required from Storage:

(989 gpm)(2.0 hrs)(60 min/hr) = 118,700 gallons

The Village presently has 130,000 gallons of storage with the reservoir completely full at the overflow level and 121,400 gallons at the current high water level. Since a fire could occur when the reservoir is not at the high water level, the "effective" storage (volume at the low water level) should be considered. There is 104,400 gallons available at the current low water (pump on) level. With the two Village wells in operation, 118,700 gallons of storage is required to satisfy Criterion No. 2 as shown above. The effective reservoir storage of 104,400 gallons is 14,300 gallons less than the required 118,700 gallons required to satisfy Criterion No. 2.

Considering the firm well capacity (largest well out of service), 163,700 gallons is required to satisfy Criterion No. 2. The effective storage volume of 104,400 gallons is 59,300 gallons less than the required 163,700 gallons required to satisfy Design Criterion No. 2.

The third design criterion is also used to check the adequacy of the system's storage. It recommends the average daily demand to be available from storage. The current average daily water demand is 37,000 gpd. This demand is 67,400 gallons less than the effective storage available (104,400 gallons) and 84,400 gallons less than the total storage available (121,400 gallons). These storage volumes equates to 2.8 days of storage detention time considering the effective storage and 3.3 days considering the total storage volume respectively. It is recommended that storage detention time not exceed 2-3 days. It should be noted that the working storage volume (17,000 gallons) is about half of the average daily water demand of 37,000 gallons resulting in a detention time of 0.5 days.

In some communities, such as the Village of La Farge, it is difficult to provide the storage volumes required for the high fire flow demands recommended for commercial and industrial areas when lower average daily demand exists. A large amount of storage may be required to provide the fire flow if the community has a low well/supply capacity. However, storage should not appreciably exceed the average daily demand

due to freezing and water quality concerns. In these cases, it is recommended that storage be paced with average daily demand and/or additional well capacity is added. Therefore, no additional storage is recommended at this time.

Water Distribution System

More than half (53.4%) of the Village's potable water distribution system is composed of 6-inch diameter water mains. Eight-inch diameter water mains compose approximately 30.3% of the distribution system. From the 2019 WPSC Annual Report as listed above in Table 4.7-E, there is 100-ft of 2-inch diameter water mains, 353-ft of 4-inch diameter water mains, 5,167-ft of 10-inch diameter water mains, and 697-ft of 12-inch diameter water mains. The oldest water main in use is cast iron located on Main Street that was installed between 1902 and 1920 and accounts for 13% of the water main in use. The minimum size of newly constructed water main allowed to provide fire protection and serve fire hydrants per Wisconsin Administrative Code NR811.70(5) is 6-inches. Typically, water mains larger than 6-inches in diameter are needed to provide the required fire flow while maintaining a minimum residual system pressure of 20 psi. It is important to note, that the 4-inch water main on Penn Street is connected between a looped 6-inch main, and so it is not limiting the fire flows of the system. A grid of large diameter (10" and larger) mains should exist between supply sources, storage facilities, and high demand commercial and industrial users as well as structures with higher recommended available fire flows. Therefore, the Village should be working to replace the older 2-inch, 4-inch and 6-inch diameter mains with at least 8-inch diameter mains.

A grid of large diameter mains should exist between supply sources, storage facilities, and high demand commercial and industrial users, as well as structures with higher recommended available fire flow. There is a main trunk line of 8-inch water main starting from the northeast side of the Village. This main runs along the central part of the Village and continues to the south end of the Village. However, both Wells No. 2 and No. 3 pump into a 6-inch water main that then ties into the main trunk line of 8-inch water main. Also, the reservoir connects into a 6-inch water main that serves the southern part of the distribution system.

Over the years, there have been various water main replacement and extension projects as follows:

- 1993 - Water main improvements of 6-inch and 8-inch ductile iron water main:
  - Penn Street (from State Street to Elm Street): 639 ft of 6-inch DI
  - Main Street (from Cherry Street to water main dead end): 258 ft of 6-inch DI
  - Snow Street (from Cherry to water main dead end): 250 ft of 6-inch DI
  - Maple Street (from Main Street to North Street): 667 ft of 6-inch DI and 688 ft of 8-inch DI
  - Cherry Street (from Main Street to water main dead end): 510 ft of 6-inch DI
- 2003 - Extension of water main to serve new booster station and Organic Valley Headquarters. Extension included the installation of a total of 116 ft of 6-inch, 391 ft of 8-inch, 795 ft of 10-inch, and 697 ft of12-inch diameter ductile iron water main.
- 2009 – 6-inch water main was extension to the fire station and community center along Oak Street and Cherry Street Alley.
- 2012 – Water main extension:

- Easement Between Organic Way Drive to the north end of Oak Drive: 10-inch DI
- Oak Drive: 10-inch DI
- Easement from the North end of Maple Street to south end of Oak Drive: 10-inch DI
- Easement from the end of Oak Drive to reservoir: 10-inch DI
- 2015 – Water main extension on Highland Street

The Village has had a number of water main breaks within its distribution system. The water main breaks have occurred on the following locations:

- Highland Street (between Oak Street and Cherry Street): 1 water main break
- Mill Street (south of Adams Street): 4 water main breaks
- Mill Street (north of Adams Street): 2 water main breaks

Dead end mains in the distribution system should be avoided since dead end mains can have long detention times resulting in poor water quality. Also, if a break occurs in one of these dead end mains, the area served by it is cut off from the rest of the system. Looping these dead end mains to other mains in the system can eliminate water quality concerns and improve reliability of the system. The distribution system contains one signification 8-inch dead end main extending from Adams Street to Mill Street. This dead end main has had many water main breaks. The goal to loop dead end mains should be a high priority when water mains are replaced and additional development occurs.

Summary of Water Supply, Storage, and Distribution System Deficiencies and Operational Difficulties

Well No. 2 does not have a water heater to provide tempered water to the eyewash/drench shower.

Well No. 3 has an eyewash station, but not a drench shower.

Well No. 3 does not have an emergency electrical generator or auxiliary engine to operate the well during a power outage.

The Village has had a number of water main breaks within its distribution system. The water main breaks have occurred on the following locations:

- Highland Street (between Oak Street and Cherry Street): 1 water main break
- Mill Street (south of Adams Street): 4 water main breaks
- Mill Street (north of Adams Street): 2 water main breaks

Recommendations to Address Water Supply, Storage & Distribution System Deficiencies and Operational Difficulties

1. Well No. 2 Eyewash/Drench Shower Water Heater: The installation of a water heater to provide tempered water to the eyewash/drench shower as required by current OSHA regulations is recommended.

2. Well No. 3 Eyewash/Drench Shower: The installation of an eyewash/drench shower unit is recommended so that this facility has both an eyewash and drench shower as required by current OSHA regulations. A water heater should be

installed to provide tempered water to the eyewash/drench shower station which is also required by current OSHA regulations.

3. Well No. 3 Emergency Generator: A natural gas powered emergency electrical generator with automatic transfer switch to automatically provide emergency electrical power in the event of a utility power failure is recommended.

4. Main Street Water Main Replacement: The Wisconsin Department of Transportation (WisDOT) is planning to reconstruct Main Street (STH 82) from Mill Street to Maple Street in 2024 or 2025. It is recommended that the Village replace the aged water main in this section of Main Street in conjunction with this WDOT project.

5. Highland Street Water Main Replacement: It recommended that the old water main on Highland Street from Oak Street to Cherry Street be replaced to prevent additional water main breaks in this section.

6. Mill Street Water Main Loop: This recommendation addresses the long dead end off of Adams Street to Mill Street which has had several breaks. The 8-inch water main extending south on Mills Street from Adams Street would be extended and looped to the extended 6-inch water main on the west end of North Street. Looping the water main will improve fire flows and water quality, and reduce the chances of future breaks.

Detailed Engineer's Opinions of Probable Costs for the recommendations listed above can be found in the Appendix.

Stormwater Management System

Existing Facilities Summary

The Village's stormwater system consists of ditches and various sized culverts. There is no map or hydrologic data available of the stormwater system. Village Public Works Staff mentioned that they have a very limited storm sewer system. With no storm sewer, much of the storm water sheets down the streets during rain events.

Recommendations to Address Deficiencies and Operational Difficulties

1. Complete Assessment of Storm Sewer System: This recommendation is to assess the stormwater needs throughout the Village. Completing an assessment will determine where deficiencies can be improved with the installation of new storm sewers or culverts. With that, the deficiencies can be adequately addressed to help minimize future localized flooding in the stormwater system.

2. Model and Map Stormwater System: This recommendation is to address the lack of stormwater and hydrologic data of the Village's stormwater system. This will allow the Village to model various storm events (5-, 10- 25- and 100-year storm event) and how that affects the Village's present hydrology. With that, improvements to the stormwater system can be planned to convey the smaller storm events (up to the 10-year event) which comprise the majority of rainfall events.

Dry Utilities (Gas, Communications, Electric Utility)

Existing Facilities Summary

Natural Gas

Midwest Natural Gas provides gas service to the Village of La Farge. Their distribution lines and facilities adequately support the Village and can handle any expansions that may be planned for the Village.

Communications

Vernon Communications provides communication services to the Village of La Farge. Fiber optic lines are in place throughout the Village to provide high speed internet service to the residents and businesses. The Village is well positioned to provide excellent internet and communication services. The Village's communication infrastructure map can be found on Figure 4.7-G Village of La Farge – Communications Map in the Appendix.

Electric Utility

The Village of La Farge operates an electric distribution utility to provide electric service to the Village residents and residents in the surrounding area. The utility has two power sources; a single radial connection to the electric grid and a local diesel generator. The electric grid provides the main source of power and the diesel generator provides standby power. Both of these power sources feed a switchgear that distributes power to four distribution circuits and then to the utility customers.

The existing substation is located within the Kickapoo River floodplain. Both the switchgear and the standby generator have been damaged twice within the last 12 years due to floodwaters. To improve the reliability of the electrical utility, the Village is currently planning to construct a new substation on higher ground that is outside of the Kickapoo River floodplain. A copy of the Preliminary Engineering Report for the relocation of the substation is included in the Appendix.

The Electric Utility distribution system is in good shape with no major improvements required outside of some work related to the substation relocation. Some of the older underground cables can be planned for upgrades with a routine maintenance program.

Community Solar Initiative

Since 2014, a group of stakeholders have been working with the Village and the local Utility to investigate the opportunity to utilize solar power as a way to strengthen the Village's self-sufficiency and local economy. In addition, a solar field would provide energy savings, environmental benefits, and demonstrate the community's intent to utilize sustainable resources, when possible.

Through ongoing communications and investigation with State agencies, a preliminary plan has been developed that identifies the potential siting of a 3.2-acre community solar facility immediately to the south of the Emergency Services Building at 201 S. Cherry Street. This facility would provide between 400 and 1500kW to 552 utility customers within the Village.

There is already substantial support for this initiative. One of the largest energy users within the community, Organic Valley, has identified a goal of targeting net zero clean energy for the company's facilities in La Farge. In addition, there is extreme interest from other commercial and residential users.

A substantial amount of effort and analysis has already been complete for the La Farge Community Solar Initiative. The project's description and goals are outlined in a narrative developed by the Community Solar Advisory Committee, which is included in Appendix C of this report.

Emergency Services

The La Farge Fire Department is located on the corner of East Main Street (STH 82) and South Cherry Street, but set behind a few houses, in the building known as the Emergency Services Building. It is located adjacent to the floodplain, but not in. La Farge Area Ambulance is housed in the same Emergency Services Building as the fire department. Ambulance serves the Village, and the surrounding Towns of Clinton, Forest, Stark, Webster, Whitestown, and Union.

Response to the east and north are minimally impacted by the flooding of the Kickapoo River. Areas to the south and west of the Village are greatly impacted by the flooding river as emergency vehicle need to find alternate routes to the location of the incident. Incidents to the west require the assistance in the form of mutual aid from Westby and or Viroqua. To the south, La Farge may have to request Viola or Richland Center for mutual to respond to the incident. In most instances when La Farge is dealing with a flood, so is Viola, so mutual aid may be limited and everything becomes an emergency.

4.8 Community Facilities

Architectural Design Consultants, Inc., an architectural firm from Lake Delton, conducted a thorough assessment of all other community-owned facilities. Executive summaries for each of the four facility assessments are included on the following pages. In addition, the full report for each facility is located in Appendix B. Facilities reviewed include the community center, Emergency Services Building, library, and village hall.

Facility Condition Review

La Farge Community Center

Reviewed July 28, 2020

Executive Summary Highlights

- La Farge Community Center was built in 1927 by the local Freemason Society.
- Periodic upgrades have occurred over the years to materials and finishes, very few space reconfigurations
    - Renovations when converted to community center in the 80's / 90's
    - Rear alley-side ramp to both levels; exterior wood to upper level, enclosed vestibule to lower level
    - Energy upgrades in 2005
    - Currently used by Boy Scouts, VFW, and other miscellaneous public gatherings and events
- Building is a composite masonry exterior load bearing wall building with wood from floor and roof and concrete basement floor slab on grade. Roof is shallow slope wood frame with outbound insulation and built-up asphaltic roof. Ramp vestibule is wood frame with metal roof and concrete frost wall foundations.
- Code Review Items:
    - 1921 Wisconsin Industrial Commission building code
    - Approximately 2,200 sf per floor, plus ramp mezzanine on lower level
    - Classified originally as an Assembly building, currently classified as Assembly A-3: Community Hall
    - No fire alarm or sprinkler system, residential independent smoke alarms
    - Exit signs are present, but many not lit, egress lights
    - Does not meet any current accessibility standards
- Site Review Items:
    - Narrow greenspace on north, west and south with mature trees on south, alley to the east
    - street parking, public walk only on west side, accessible parking sign on south street
    - stormwater east to west around building, down streets and to inlets near intersection
- Building Review Items:
    - Exterior finishes in fair condition; some tuck-pointing needed, paint window trim, siding needs stain
    - Exterior doors and windows are in fair condition and need sealants replaced
    - Interior finishes fair to poor condition; lower level finishes good in meeting space, original are rough
    - Interior environment is fair; damp smell in lower level, good daylight, upstairs lighting dim, no fresh air
    - Structure appears solid other than lower level buckling floor along south wall
- MEP (Mechanical, Electrical, Plumbing) Systems Review Items:
    - (2) gas fired forced air furnaces with AC each, no kitchen exhaust
    - 200-amp electrical service, distribution system and receptacles fair condition, telephone and internet
    - Lighting primarily fluorescent as part of 2005 energy upgrades, some LED, some incandescent
    - Plumbing fair; 1995 65-gallon gas water heater, new sump pump, no accessible fixtures
- Flood of 2018 did not affect building, but there has been groundwater seepage on south wall
- Building overall in fair condition, but can start to be costly to maintain without upgrades
- Should continue to serve the community effectively for the next 20 – 30 years as long as properly maintained and capital improvements recommended are implemented. Limited to no expansion opportunities.

General Maintenance and Capital Improvements Recommendations

- **Immediate Needs and General Maintenance Recommendations: 2020 dollars**

Exit Lighting and Egress Lighting Upgrades	$750 - $1,000
Install Handrails at Interior Ramp	$750 - $1,000
Replace Guardrail at Main Stair	$750 - $1,500
Repair / Replace Raingutter Supports	$750 - $1,000
Install Kitchen Exhaust	$1,000 - $1,500
Install Commercial Grade Accessible Door at Ramp Lower Level	$1,500 - $1,800
Clean, Repair and Paint Wood Frames around Clad Windows	$2,000 - $4,000
Re-Finish Meeting Hall Hardwood Floor	$3,000 - $4,000
Upgrade Exterior Doors to Commercial Grade Energy Efficient (3)	$4,500 - $6,000
Masonry Tuck-Pointing and Sealant Replacement	$4,000 - $8,000
Replace Front Concrete Stair and Footings	$8,000 - $10,000

- **Owner Requested / Planned Capital Improvements: 2020 dollars**

  None Requested

- **Consultant Recommended Capital Improvements: 2020 dollars**

New Exterior Wood Framed ADA Ramp with Landings	$10,000 - $12,000
LED Lighting Upgrades (Interior & Exterior)	$15,000 - $25,000

Facility Condition Review

La Farge Emergency Services Building

Reviewed July 28, 2020

Executive Summary Highlights

- La Farge Emergency Services Building was built in 2010 with grant funding assistance.
- No additions or significant alterations since originally built
- Building is a pre-cast / tilt-up concrete shell with wood truss framed roof with shingle finish. Building has frost wall foundations and interior wood framed partitions. Gable ends have ribbed metal wall panel.
- Code Review Items:
    - 2006 International Building Code Jurisdiction
    - 17,525 sf, single story, expandable
    - Classified as S-1: Vehicle Storage Occupancy: Fire Dept, Police Dept, EMT, Village Board Room
    - Building has fire alarm and is fully sprinkled
    - There is a CO^2 detection system in garage
    - Fire Dept Apparatus Bays have full CEVS (Captured Exhaust Ventilation System)
    - Meets most all current Accessibility Standards
- Site Review Items:
    - Greenspace to the east, paved parking south, paved drives west and north
    - Decorative landscaping at entry
    - Walks and drives accessible in good condition, asphalt needs crack fill and seal coat with new striping
    - Stormwater sheet drains and collects on site to retention / infiltration ponds
- Building Review Items:
    - Exterior finishes in good condition, some minor cracking in pre-cast concrete panels
    - Exterior doors and windows in good condition
    - Interior finishes in good condition; floors, trim, doors, drywall
    - Interior environment is dry and clean with ample fresh air and daylight
    - Structure is solid and in good shape
- MEP (Mechanical, Electrical, Plumbing) Systems Review Items:
    - Gas fired forced air systems office area, radiant tube overhead in garage spaces, AC in office
    - Electrical in good shape and sufficient; 600-amp service with 200-kw diesel generator
    - Lighting is primarily fluorescent with dedicated control panel, consider LED upgrades
    - Plumbing is in good shape, 6” service, 50-gal electric in office area, 55-gal elec EMS, gas fired boilers in wash bay
- Flood of 2018, water up to parking lot but not in building
- Building is in great condition and has been very well maintained
- Should continue to serve the community effectively for the next 30 – 50 years as long as properly maintained and capital improvements recommended are implemented. There is room for expansion on site.

General Maintenance and Capital Improvements Recommendations

- **Immediate Needs and General Maintenance Recommendations: 2020 dollars**

Traffic Sealant Between Walks and Asphalt Parking	$250 - $500
Strip, Prime, Paint Wash Bay Gas Piping	$500 - $750
Parking Lot Stall and Access Isle Striping	$750 - $1,000
Asphalt Parking Lot Crack Fill and Seal Coat	$8,000 - $10,000

- **Owner Requested / Planned Capital Improvements: 2020 dollars**

  None Requested

  Owner is setting money aside now for new roof as needed in future

- **Consultant Recommended Capital Improvements: 2020 dollars**

LED Lighting Upgrades (Interior & Exterior)	$45,000 - $60,000

Facility Condition Review

Lawton Memorial Library

Reviewed July 28, 2020

Executive Summary Highlights

- Lawton Memorial Library was built in 1989
- Library was doubled in size in 2015 as part of private fundraising project
- Building is a single story slab on grade, wood framed building with wood trusses and shingle roof. Exterior finishes are engineered wood siding and natural thin stone veneer with clad wood windows.
- Code Review Items:
    - Original Building 1987 Wisconsin DILHR Code, Addition 2009 IBC / IEBC
    - 2,100 sf original building 1989, 2,000 sf addition 2015 – expandable
    - Classified as Assembly A-3: Library
    - No fire alarm or fire sprinkler system exists – not required
    - Meets most all current Accessibility Standards
- Site Review Items:
    - Greenspace to the east, north and west, abundant decorative landscaping and mature trees
    - Walks and drives are accessible, parking on street and in alley
    - Stormwater management is an issue on the north side of the building with shallow grades and no opportunity for site fall off and limited swaling opportunity
- Building Review Items:
    - Exterior finishes are in great condition, being fairly new
    - Exterior doors and windows are in great condition, all new or replaced in 2015
    - Interior finishes in great condition, all new or replaced in 2015
    - Interior environment – no issues, dry, fresh air, good daylighting and exhaust
    - Structure is solid and in good shape
- MEP (Mechanical, Electrical, Plumbing) Systems Review Items:
    - Gas fired forced air furnaces with AC – all new in 2015
    - Electrical is in good shape, completely upgraded in 2015, supplemental solar power added in 2019
    - Lighting in general is in good shape, mostly all LED per 2015 upgrades, some have been failing
    - Plumbing is in good shape, 10-gallon electric water heater, good low-flow fixtures
    - Security system with 10-day on-site storage capacity, views exterior entries only
- Flood of 2018 did not affect building, flood water more than a block away
- Building in general is in great shape and has been very well maintained
- Should continue to serve the community effectively for the next 30 – 50 years as long as properly maintained and capital improvements recommended are implemented, although expansion opportunities on site are limited without affecting public park space.

General Maintenance and Capital Improvements Recommendations

- **Immediate Needs and General Maintenance Recommendations: 2020 dollars**

  None Identified

- **Owner Requested / Planned Capital Improvements: 2020 dollars**

  Address Site Stormwater Controls $5,000 - $10,000

- **Consultant Recommended Capital Improvements: 2020 dollars**

Facility Condition Review

La Farge Village Hall

Reviewed July 28, 2020

Executive Summary Highlights

- La Farge Village Hall was built in 1953
- Varied renovations over the years, latest; energy upgrades in 2005 and public space renovation 2011
- Building is of exterior masonry construction with wood framed floors and roofs. Front public portion of the building is single story slab on grade with shallow slope roof draining to the east. Back portion is 2-story with full basement. Single Residential apartment on the second floor with flat wood framed roof draining to the south.
- Code Review Items:
    - 1948 Industrial Commission Commercial Building Code
    - Approx 3,000 sf first floor, 1,000 sf basement, 1,000 sf second floor apartment
    - Classified as non-separated B: Business and R-3: Residential
    - No Fire Separation between Business and Residential per current code requirements
    - Building has no fire alarm or fire sprinkler system
    - Building does not meet any current Accessibility Guidelines
- Site Review Items:
    - Greenspace to the east, public sidewalk to the north, adjoining building to the west, paved alley south
    - Non-accessible ramped front entry, non-accessible steps at back entry / exit
    - Stormwater did not appear to be an issue with proper drainage at perimeter, minor basement seepage
    - No dedicated accessible parking stall
- Building Review Items:
    - Exterior finishes vary; brick, metal, painted cmu, all in fair condition – masonry need painting, tuck-pointing
    - Exterior doors and windows vary; aluminum, hollow metal, painted wood, some windows single pane
    - Interior finishes are in good condition in front public spaces, back areas and basement rough
    - Interior environment is good in front public spaces, no dampness, daylight, fresh air, basement damp
    - Structure appears solid and in good shape other than a few suspect joists in the basement
- MEP (Mechanical, Electrical, Plumbing) Systems Review Items:
    - Single gas fired forced air furnace in basement, AC, apartment has its own unit with window AC
    - Electrical is in fair condition, random runs through joist spaces
    - Lighting is combination of fluorescent and incandescent, recommend LED lighting upgrade project
    - Plumbing systems are in fair condition, some outdated fixtures and piping, 40-gallon gas water heater
- Flood of 2018 did not affect the building other than seepage into the basement
- Building is in fair condition, but will begin to cost money to upgrade and maintain
- Should continue to serve the community effectively for the next 15 – 20 years as long as properly maintained and capital improvements recommended are implemented. No space needs were identified. Limited growth opportunities exist for the village in the building.

General Maintenance and Capital Improvements Recommendations

- **Immediate Needs and General Maintenance Recommendations: 2020 dollars**

Replace Back Exterior Light Fixture	$250 - $500
Perimeter Caulking and Sealants Allowance	$500 - $750
Replace Existing Single Pane Window on South Façade	$500 - $750
Front Window Jamb Repairs and Sealants	$500 - $1,000
Tuck-Pointing Masonry Façade	$750 - $1,000
Structural Review of Stairs, Floor Joists	$1,000 - $1,500
Engineering Assessment of Floor Fire Separation	Needs Further Review

- **Owner Requested / Planned Capital Improvements: 2020 dollars**

  None Requested

- **Consultant Recommended Capital Improvements: 2020 dollars**

ADA Accessible Toilet Room Renovation	$10,000 - $15,000
LED Lighting Upgrades (Interior & Exterior)	$15,000 - $20,000

5.0 Analysis of Alternative Scenarios

The Flood Recovery Committee was charged with investigating alternatives for long-term recovery of the community. With the assistance of information developed through the assessment phase, the Committee was able to explore a variety of options that ranged from property-specific to community-wide initiatives. Through a series of working meetings, and with input from stakeholders through the series of public workshops, the Committee was able to navigate a series of discussions that evolved into the recommendations throughout this Plan. The following is an outline of the recovery scenarios that were discussed throughout the process.

5.1 No Action

When considering alternatives, one of the base line options that must always be considered is the 'No Action' option. What would the future of La Farge look like if the community does nothing to address these problems? Is it possible for the village to remain viable without doing anything? Discussion amongst the Committee was that this was not an alternative that should be considered. With additional flood events, residents lose their homes and move out of the area, and businesses along the Main Street corridor continue to lose their facilities. Long-term, this option leads to continued shrinking of the community, reduction in taxes and services, the decline of the school district, and the loss of other major businesses.

5.2 Flood Mitigation Infrastructure

The Kickapoo River travels along the western edge of the community, traveling perpendicular to the Main Street corridor, which is the commercial heart of the village. Many homes and businesses located south of Main Street have been razed due to substantial damage. While some structures remain, much of the southern portion of the community has been cleared. The Committee recognized that if the remaining buildings were to be salvaged, protection would be required in the form of infrastructure improvements.

A variety of flood mitigation infrastructure scenarios were investigated. This included such things as raising and lowering roads to impact flood conveyance, opportunities for dry land access, and potential levee scenarios. Various alternatives were investigated and analyzed in terms of feasibility and cost, and ability to protect against future flooding. Ultimately, the Committee identified a series of priority projects that could be implemented to provide a comprehensive flood protection strategy. Each of these priorities is identified in more detail in Section 7.0.

5.3 Partial Relocation

Partial relocation of structures from the floodplain would provide property owners with the opportunity to choose if they want to relocate or not. This option provides alternative locations for building and home owners to construct new facilities on high ground and vacate buildings susceptible to potential future flood events. With limited geographic areas for future growth within and around the community, the Committee felt confident that a couple of options for potential relocation were a feasible alternative. The Committee proceeded with identifying possible sites for residential, commercial and light industrial development. Ultimately, two large sites and one smaller area were identified

for partial residential relocation and concept plans for those sites were developed. These sites and concept plans are identified and discussed in further detail in Section 6.0.

5.4 Full Relocation

Full relocation is an option that would mean relocating all structures in the floodplain to an area on higher ground. This would essentially remove any remaining structures that have been affected by flooding, but have not yet been designated substantially damaged. This particular option would need to occur over a long period of time and would happen in phases. This scenario would also be a requirement of anyone who was located in the floodplain, rather than a voluntary action.

After consideration, the Committee determined it was in the Village's best interest to maintain the downtown core to the extent possible. Required relocation was not favored, and Committee members preferred property owners to have their own choice on what they wanted for the future of their structures. Ultimately, full relocation was not a preferred alternative for moving forward.

5.5 Flood Proofing Structures and Redevelopment

While the Village of La Farge can develop strategies about community-wide flood recovery efforts, there are actions that individual property owners can take to assist with the protection of future flood events. One of these options is flood proofing. Structures within the flood fringe, or that are susceptible to flood events, can make physical modifications to a structure in order to prevent flood water from entering the building. This includes alternatives such as physically lifting the structure to a higher elevation or installing temporary flood gates at first floor openings. Flood proofing efforts on private property shall be the responsibility of individual property owners. While the Committee encourages this measure by anyone who felt their home or business was susceptible, they did not pursue any further actions regarding flood proofing efforts. Further details about flood proofing can be found in Section 7.1.

Another option for property owners located on the flood fringe is redevelopment. So long as the property has dry land access, it can be redeveloped to place the structure in a preferable location on the site. Doing so would also provide the opportunity to fill the site to a higher elevation, also making the structure less susceptible to future flood events. Infill and redevelopment sites along primary highway corridors were identified for future commercial growth, which will provide the greatest opportunity for local businesses to expand or relocate.

6.0 Site Development Master Planning

6.1 Overview of Alternatives

After an extensive evaluation of multiple areas throughout the Village of La Farge, three resettlement sites with development potential were selected as opportunities for future residential growth. Numerous in-fill and redevelopment areas were also identified for commercial and light industrial development. These sites were presented at public workshops and received input from community stakeholders. The map after page 62 identifies the three recommended resettlement sites.

6.2 Discussion & Considerations of Site Development Alternatives

Traffic Counts

With the devastation that flooding events have had in the downtown core, it was critical to identify opportunities for commercial growth and development within the community. However, it is important when identifying these alternative sites that traffic counts be taken into consideration. Commercial growth should be located in an area with high traffic volumes to support this development. Figure 6.2-A to the right shows traffic count information from the Wisconsin Department of Transportation for the Village. With state highways 82 and 131 transecting the community, these corridors provide the greatest opportunity for higher traffic counts to support commercial development.

Figure 6.2-A: Traffic Counts

Environmental Assessments & Endangered Species

A thorough review was conducted of available environmental data systems through the Department of Natural Resources and the United States Department of Agriculture, to determine the potential impact of development on local environmental factors. The following is a summary of the results determined from that environmental review.

BRRTS Map

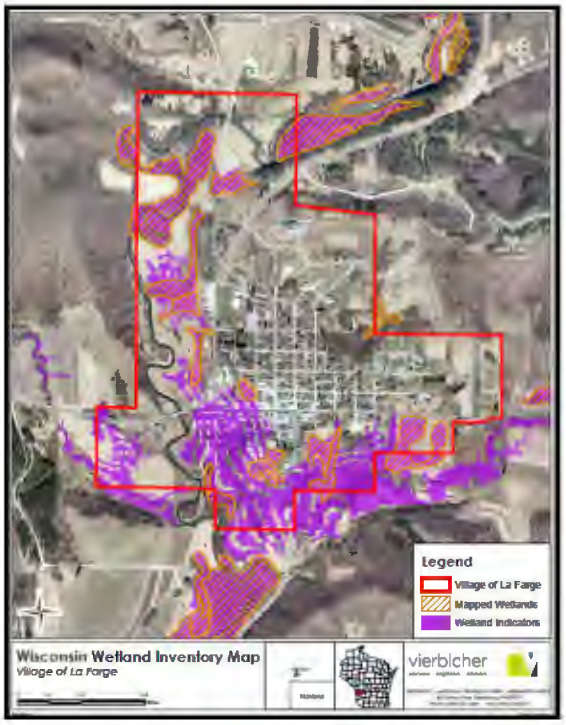
According to the WDNR Bureau for Remediation and Redevelopment Tracking System (BRRTS), there are no open or closed sites within or adjacent to the three resettlement sites. There are numerous closed sites located along the STH 82 and STH 131 corridor in the commercial areas. Several of the closed sites have continuing obligations that apply.

National Wild and Scenic Rivers Map

There are no national wild or scenic rivers within Vernon County.

WDNR Wetland Map

According to the WDNR Surface Water Data Viewer, there are no mapped wetlands or wetland indicators within the resettlement project sites. There is a small area of wetlands on the north end of the proposed in-fill site located west of STH 131.

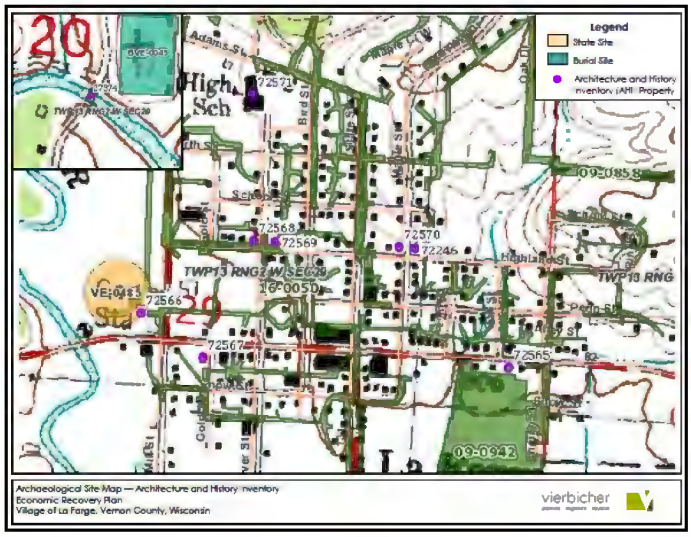


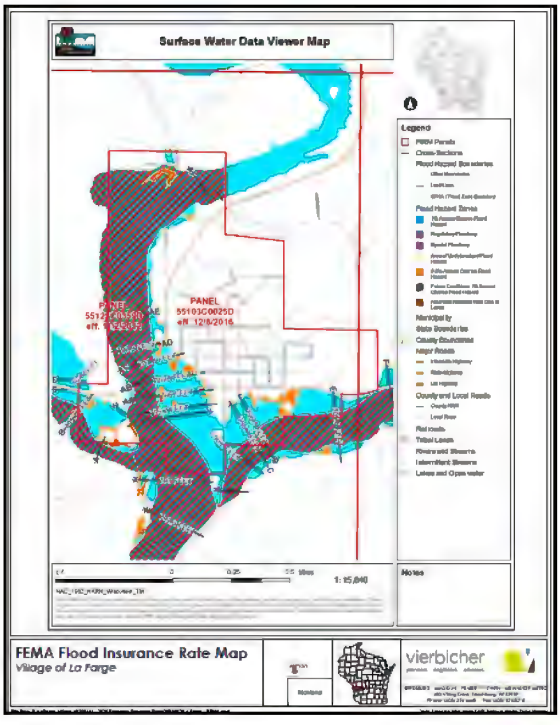
FEMA Map

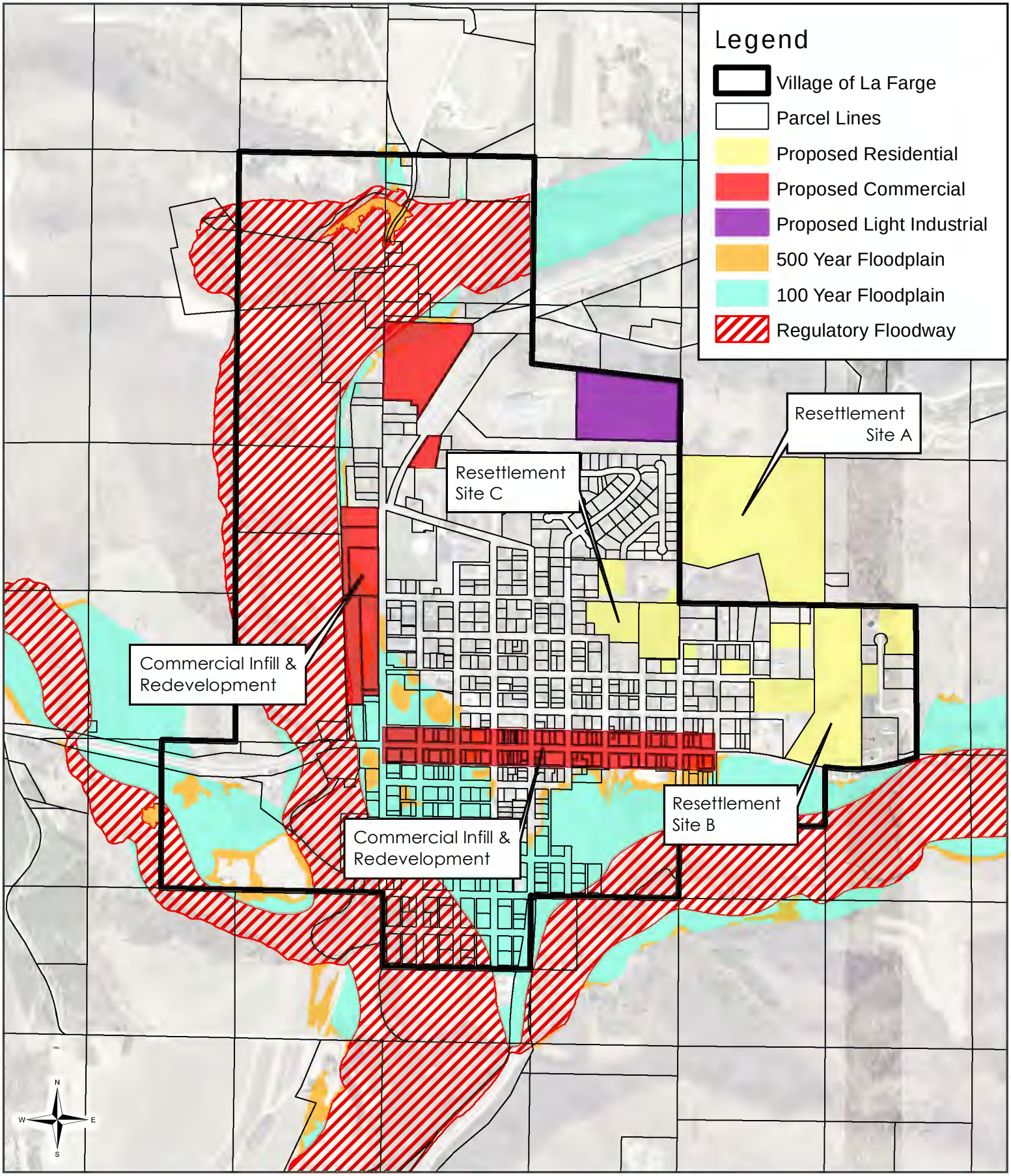
According to the Federal Emergency Management Agency (FEMA) Flood Map Service Center, the majority of the project areas are not within the regulatory floodway or floodplain. However, portions of the in-fill and redevelopment sites are within the 100 and 500 year floodplain.

Wisconsin Historical Society Archaeological Site Inventory Map

According to the Wisconsin Historical Society Archaeological Site Inventory, there are no historical or archaeological sites within the resettlement sites, or in-fill and redevelopment sites.







Community Development Map

Village of La Farge

0 0.1 0.2 0.4 Miles

Vernon

Richland

vierbicher
planners | engineers | advisors

REEDSBURG - MADISON - PRAIRIE DU CHIEN - MILWAUKEE METRO
400 Viking Drive, Reedsburg, WI 53959
Phone: (608) 524-6468 Fax: (608) 524-8218

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Data Sources:

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6.3 Site Development Plan Layouts

SITE A

Site A is located in the northeastern area of the village. It includes a large parcel that is currently located outside of the corporate limits and would need to be annexed. It also includes a 15 acre parcel immediately to the east of the Organic Valley headquarters. This site is the village's only opportunity to provide for a large-scale commercial or light industrial development. This site is already served by Organic Valley Way and no additional improvements are necessary to attract a developer.

Site A would require the extension of Organic Valley Way to the east and south to serve a new residential area of 32 acres in size. The site would include a multi-family site on the northern end of the development, with 42 single-family parcels.

This site is at a higher elevation, than most of the village. Site A is also bisected by a line that denotes the upper limit of the water pressure zone. Parcels developed above that limit will require installation of a water booster station. A site is reserved for a potential water booster station, located immediately to the south of the existing water reservoir.

As a greenfield, Site A would require all new infrastructure to serve the development. The concept plan for Site A is shown on the following page.

Preliminary Site Development Project Costs: $2,545,000.

The above cost represents the full build-out for Site A, with the exception of the land acquisition. Site A could be developed in phases in conjunction with new development and availability of funding.

Included within the cost estimate:

Following is a summary of the scope of work included in the estimated cost.

- Sanitary Sewer collection system, lift station and force main;
- Water Distribution system and booster station;
- Storm Sewer and Storm Water Management Basins;
- Site Grading & Fill;
- Contingency;
- Professional Services.

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LEGEND

- MULTI-FAMILY
- SINGLE FAMILY
- COMMERCIAL/INDUSTRIAL (12.5 ACRES)
- ROADWAY
- GREEN SPACE
- STORM WATER FACILITIES
- SANITARY SEWER
- WATER MAIN
- STORM SEWER

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CONCEPT MAP - RESETTLEMENT SITE A

ECONOMIC RECOVERY PLAN
VILLAGE OF LAFARGE
VERNON COUNTY, WISCONSIN

REVISIONS		
NO.	DATE	REMARKS

REVISIONS		
NO.	DATE	REMARKS

SCALE: AS SHOWN
DATE: 2020-09
DRAFTER: MFEI
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PROJECT NO.: 200111
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SITE B

Site B is located north of STH 82 on the eastern boundary of the Village. The development is primarily accessed via the extension of Highland Street, which is already platted and only partially improved. This street currently accesses several single-family homes as well as the Village's water reservoir.

Approximately 20 acres in size, Site B includes new development sites as well as in-fill development and redevelopment. Three in-fill lots have been identified on the western end of School Street, where a large portion of open space could accommodate some larger single-family residential lots. It also includes redevelopment of two parcels that are currently occupied by trailer homes on the north side of Highland Street, to the west of Pine Street. The Site B Concept Plan also shows five in-fill lots along the south side of Highland Street. These sites have considerable slope, but would make good larger single-family residential lots.

The concept plan for the remainder of Site B identifies 12 single-family home sites. In addition, approximately 5 acres have been identified for multi-family homes, distributed across two different sites. Green space has been reserved to accommodate steep slopes as well as stormwater management facilities. All residential sites will be served by municipal sanitary sewer and water. The upper portion of Site B is above the minimum water pressure line. It will require either the booster station to be constructed (which is included in the Site A development costs), or individual pressure tanks installed in each individual house.

In addition, the right-of-way connections in Site B provide secondary access to an existing subdivision located on the eastern edge of the village that currently has less than ideal access up a steep slope. This secondary access point would provide emergency vehicles with a safer way to serve those homes.

The concept plan for Site B is shown on the following page.

Preliminary Site Development Project Costs: $1,220,000

The above cost represents the full build-out for Site B, with the exception of land acquisition. Site B could be developed in phases in conjunction with new development and availability of funding.

Included within the cost estimate:

Following is a summary of the scope of work included in the estimated cost.

- Sanitary Sewer collection system;
- Water Distribution system;
- Storm Sewer and Storm Water Management Basins;
- Site Grading & Fill;
- Contingency;
- Professional Services.

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SITE B

SCHOOL STREET

PINE STREET

HIGHLAND STREET

CHERRY STREET

PENN STREET

MAIN STREET

STH 82

UPPER LIMIT OF WATER PRESSURE ZONE

FLOOD FRINGE

N

E

S

GRAPHIC SCALE FEET

0 40 80 160

LEGEND

- MULTI-FAMILY
- SINGLE FAMILY
- COMMERCIAL/INDUSTRIAL
- ROADWAY
- GREEN SPACE
- STORM WATER FACILITIES
- SANITARY SEWER
- WATER MAIN
- STORM SEWER

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CONCEPT MAP - RESETTLEMENT SITE B

ECONOMIC RECOVERY PLAN
VILLAGE OF LAFARGE
VERNON COUNTY, WISCONSIN

REVISIONS

NO.	DATE	REMARKS

REVISIONS

NO.	DATE	REMARKS

SCALE
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SITE C

The third site identified for development is a small infill area located east of N. Maple Street. This large area of open land has substantial topography, however, there is space to locate up to five large single-family home sites. This would take advantage of the open space and offer the community a larger-lot format for residential home sites.

North Street is not currently constructed to the east of N. Maple Street. Therefore, sanitary sewer, water main and storm sewer would need to be installed along with the street right-of-way. The concept plan for Site C is shown on the following page.

Preliminary Site Development Project Costs: $195,000

The above cost represents the full build-out for Site C, with the exception of land acquisition. Site B could be developed in phases in conjunction with new development and availability of funding.

Included within the cost estimate:

Following is a summary of the scope of work included in the estimated cost.

- Sanitary Sewer collection system;
- Water Distribution system;
- Storm Sewer and Storm Water Management Basins;
- Site Grading & Fill;
- Contingency;
- Professional Services.

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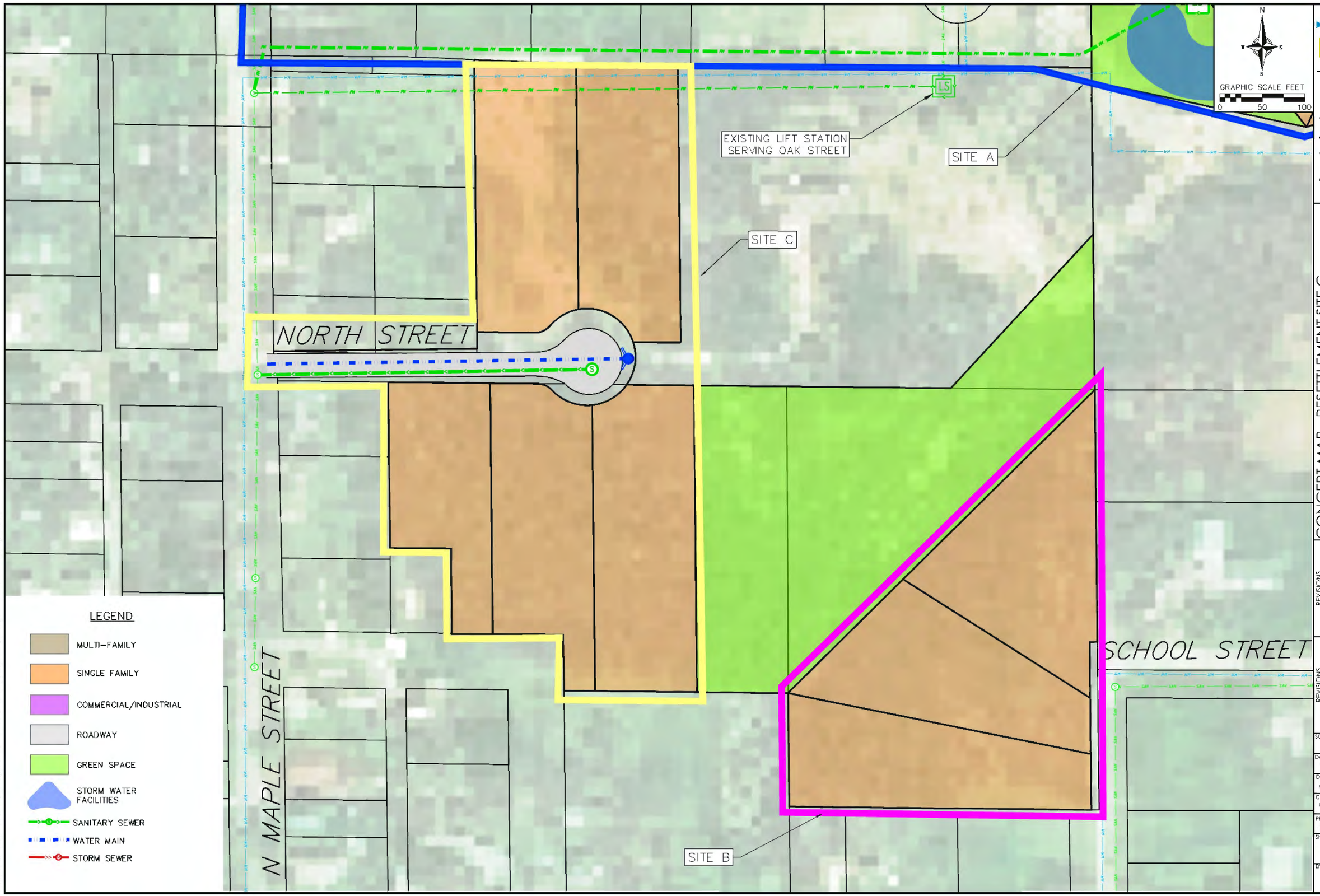

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CONCEPT MAP - RESETTLEMENT SITE C

ECONOMIC RECOVERY PLAN
VILLAGE OF LAFARGE
VERNON COUNTY, WISCONSIN

REVISIONS		
NO.	DATE	REMARKS

REVISIONS		
NO.	DATE	REMARKS

SCALE: AS SHOWN
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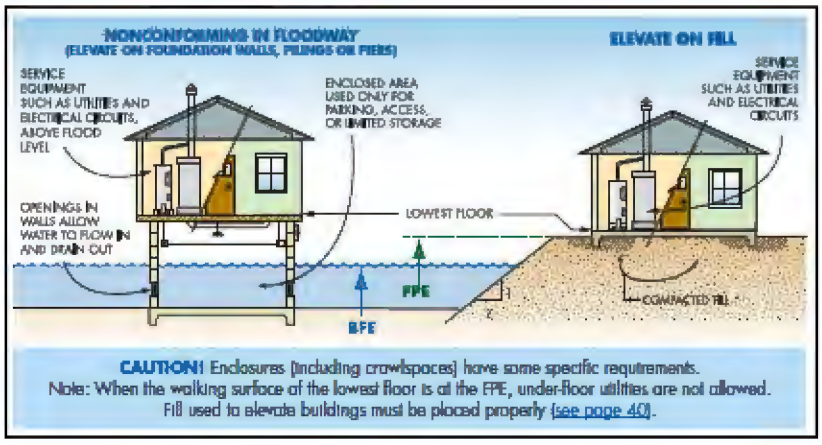
7.0 Flood Mitigation Projects

7.1 Flood Proofing

Flood proofing structures located in the floodplain is allowed, provided they meet the requirements in Wisconsin Administrative Code NR 166.16, and the Village of La Farge Floodplain Ordinance. Floods in the Kickapoo River have exceeded the flood protection elevation three times in a 12-year period. When considering flood proofing and/or redevelopment at the edge of the floodplain, it is critical that the structures be protected to an elevation above the flood protection elevation, due to actual flood events. Flood proofing measures shall be designed to withstand the flood depths, pressures, velocities, impact and uplift forces with the regional flood, to assure that the structures are watertight and completely dry to the flood protection elevation without human intervention during flooding.

The standards for flood proofing structures located in the flood fringe include:



- The elevation of the lowest floor shall be at or above the flood protection elevation (2 feet above the regional flood elevation) on fill. The fill shall be one foot or more above the regional flood elevation extending 15 feet beyond the limits of the structure.
- A basement or crawlway floor may be placed at the regional flood elevation if it is dry flood proofed to the flood protection elevation. No basement or crawlway floor is allowed below the regional flood elevation.
- Contiguous dry land access shall be provided from a structure to land outside of the floodplain, except in areas where street or sewer line elevations make compliance impractical. The municipality may permit new development or flood proofed structures where roads are below the regional flood elevation, if the municipality has written assurance from police, fire and emergency services that rescue, relief can be provided, and the municipality has a DNR approved emergency evacuation plan.

Flood proofing existing buildings may also be done by constructing a floodwall around the exterior of the building with removable flood gates at the door and window openings. See inset photo of the Casey's Gas Station in Darlington, WI. This could be an effective strategy for the Zzip Stop Convenience Store on Main Street.

7.2 In-fill and Redevelopment

Other flood mitigation opportunities involve redeveloping existing properties, or developing vacant properties at the edge of the floodplain. These parcels can be development sites for businesses moving out of the floodplain, or new businesses moving into the Village. See Figure 7.2-A for a map showing potential in-fill and development sites.

In-fill development opportunities exist on the Village owned parcel west of North Mill Street. This parcel is partially in the flood fringe, but can be filled and removed from the floodplain. Additional in-fill sites exist along West Main Street in the downtown. These sites are not in the floodplain.

Redevelopment opportunities exist north of West Main Street at the east end of the Truck Center parcel and west of North Mill Street. These parcels are currently developed, but are considered underutilized for prime highway frontage parcels. The redevelopment of these sites would involve demolition of existing buildings, raising the elevation of the site and constructing new buildings.

New structures constructed on the in-fill and redevelopment sites need to meet the flood protection standards. As stated earlier, the severity of recent flood events suggests that constructing new buildings to the flood protection elevation may be high enough. It is recommended that new buildings constructed adjacent to the floodplain should be at an elevation above the flood protection elevation.

Figure 7.2-A

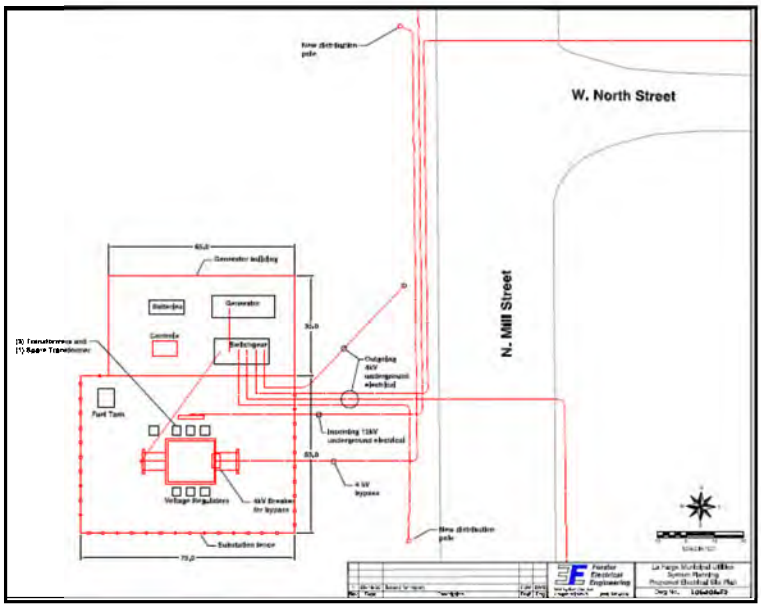
7.3 Electrical Substation & Powerhouse Flood Protection

The Village of La Farge operates an electric distribution utility to provide electric service to the residents of the Village and surrounding area. The utility has two sources of power – a single radial connection to the electric grid and a local diesel generator. The generator can be operated in parallel with the electric grid or independently in the event of a loss of the source from the electric grid. Both the normal supply from the electric grid and the standby supply from the generator feed into a metal-clad switchgear, which then distributes power to four distribution circuits to the utility customers.

Twice within the last 12 years, floods have damaged the metal-clad switchgear and the standby generator. To bypass the damaged equipment, temporary cables were laid across the ground to bypass the metal-clad switchgear until repairs could be completed months later. During both flood events, the Village experienced lengthy power outages and costly repairs. Having a reliable electric supply is essential to the success of existing businesses and for attracting new economic development.

To address this problem, the proposed project is two-fold. The first solution is to re-locate the existing electrical substation, metal- clad switchgear, and generator to another location in the Village which does not experience flooding. Site development work associated with the relocation includes a new substation yard, generator/switchgear building, and connections to the existing electrical lines. The proposed new site is on Village owned land located west of STH 131 at the intersection with West North Street. Figure 7.3-A shows the location of the proposed relocation site and conceptual site layout.

Figure 7.3 – A



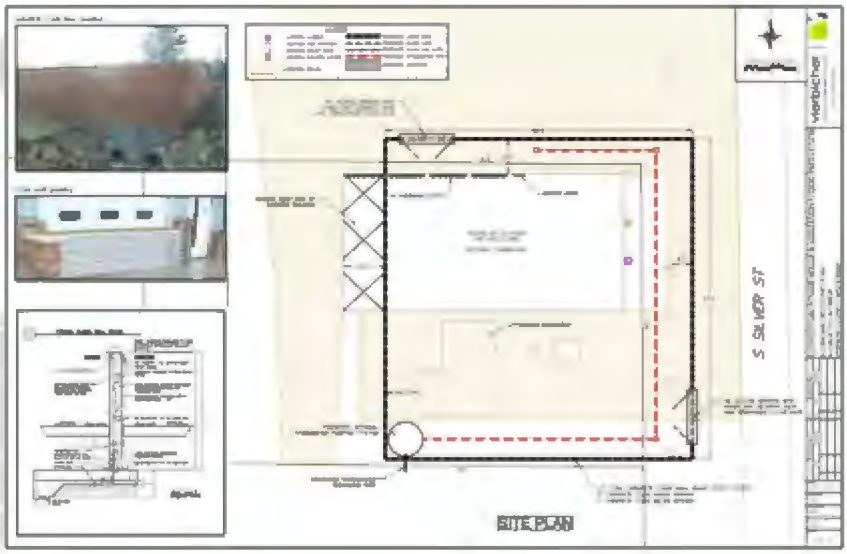
The second solution adds a permanent bypass of the metal-clad switchgear using equipment at least four feet above grade. The bypass will allow routine maintenance on the metal-clad switchgear, and is even more flood resistant than if the equipment was relocated to higher ground.

The estimated cost for the relocation of the electric substation and generator is $1,747,800.

An option to the relocation of the substation is to flood proof the existing facility. This option includes constructing a reinforced concrete flood wall around the facility with removable flood gates and interior drainage facilities. During the 2018 flood, the depth of the flood water in the existing building was 4.5 feet. The proposed concrete flood wall

for this option is 8 feet high to provide protection against future floods, plus provide a security fence. See Figure 7.3 – B for a concept plan for the flood protection wall and related improvements. **The estimated cost for flood proofing the existing facility is $550,000.**

Figure 7.3 - B



While the cost to flood proof the existing facility is considerably less, the facility does not have dry land access during flood events. This creates significant operational and safety issues during flood events. As such, the recommended solution is to relocate the facility to high ground.

7.4 Flood Mitigation Infrastructure (Flood Levee)

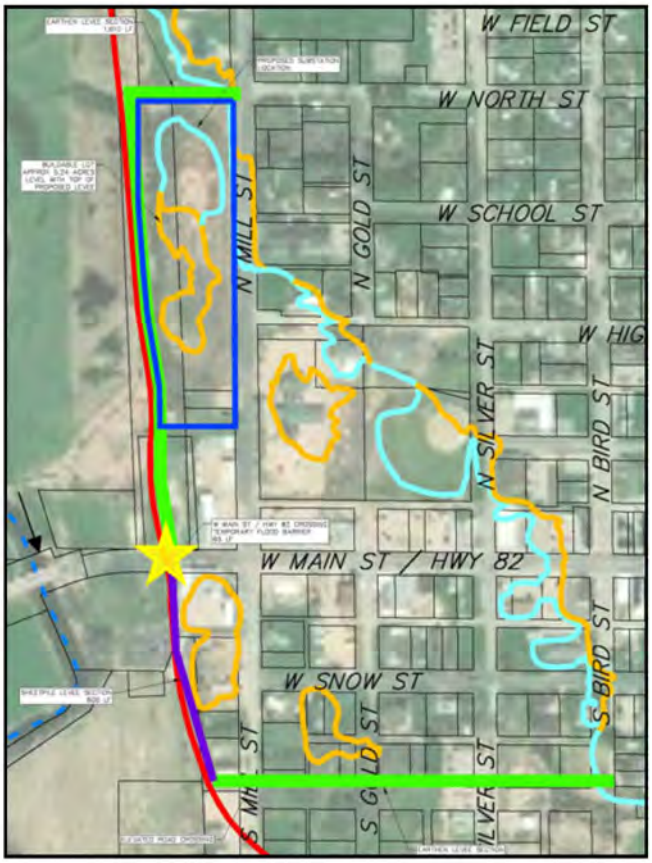
Public input was obtained related to the impact caused by the flooding and ideas to help mitigate the impact of future flooding. A primary issue that was identified is the cumulative impact that repeat flooding has on the downtown and adjacent residential neighborhoods. Due to substantial damage to structures, the Village is losing both commercial and residential structures. In addition, the disruption to businesses and the cost of repairs and clean-up, has put a financial strain on the business district.

Discussions with residents identified a flood protection levee as a probable solution to reducing the impact caused by future flooding. A concept plan was prepared for a flood protection levee to protect the downtown and adjacent neighborhoods. See Figure 7.4-A for a map illustrating the conceptual location of the flood levee.

The flood levee starts on the upstream end at the intersection of North Mill Street and West North Street. From the intersection, the levee runs west to the floodway line, then southerly along the floodway to West Main Street. This segment is proposed to be constructed as an earthen dike. From West Main Street, the levee continues southerly approximately 650 feet. This segment of levee is proposed to be a reinforced concrete wall due to the limited space between the floodway and the buildings along South Mill Street. From this point, the levee runs east along a public street right-of-way to South Bird

Street. This segment is proposed to be an earthen dike. See Figure 7.4 – A for a conceptual location for the flood protection levee.

Figure 7.4-A



The proposed flood levee is relatively straight forward with the exception of the STH 82 crossing. Three optional road crossing scenarios were investigated.

Based on the conceptual designs and review with the Wisconsin Department of Transportation, Wisconsin Department of Natural Resources and U.S. Army Corps of Engineers, a flood levee may be a viable option to mitigate future flooding.

Flood Levee Option #1: Accredited Levee

A. An accredited levee system is a system that FEMA has determined meets requirements of the NFIP regulations, as cited in the Code of Federal Regulations (CFR) at Title 44, Chapter 1, Section 65.10 (44 CFR 65.10), and that FEMA has recognized on a FIRM as reducing the flood hazards posed by a base (1-percent-annual-chance) flood. This determination is based on a submittal, by or on behalf of a community, which includes 44 CFR 65.10–compliant design data and documentation, certified by a registered Professional Engineer (P.E.), and operations and maintenance documentation under the appropriate jurisdiction. FEMA strongly encourages flood insurance for all insurable structures in floodplains, including those in areas landward of levees.

B. FEMA accreditation of a levee system does not guarantee that the levee will provide flood hazard reduction to properties from flooding. Therefore, FEMA has included a note on related FIRM panels that over topping, or failure of an accredited levee system is possible. To mitigate flood risk in residual risk areas, property owners and residents are encouraged to consider flood insurance and flood proofing, or other protective measures.

C. Levee Design Standards include:

The top of the levee shall be 3 feet above the regional flood elevation (or 500-year flood confined riverward), an additional 0.5 feet at upstream end of levee, then tapered.

1. An additional 1-foot of freeboard for a distance of 100-ft upstream of bridge or other structure that impedes flow.

2. Minimum standards of United States Army Corps of Engineers (USACE) for design and construction must be followed.
3. Interior drainage shall be provided using designated ponding areas, pumps or other similar means.
4. Must meet floodplain ordinance standards for floodway and/or flood fringe.

5. Must conduct a Hydraulic & Hydrologic analysis.
6. Emergency Action Plan must be adopted for area in floodplain behind (landward of) levee.
7. Notifications need to be provided to persons seeking construction permits in the area landward of the levee that the area is still floodplain should the levee overtop or fail.
8. Must be inspected annually and certified by a professional engineer.
   – Submit annual reports to the DNR.
9. Where the levee crosses public roadways, the roadway must be raised to the regional flood elevation, or higher to provide flood protection for the regional flood without human intervention.

Flood Levee Option #2: Non-Accredited Levee

A. Non-accredited levee systems are levee systems that do not meet the NFIP regulatory requirements of 44 CFR 65.10, and that are not shown on a FIRM as reducing the base flood hazard. FEMA recognizes that non-accredited levee systems do impact flood risk. For that reason, FEMA has developed analysis and mapping procedures for non-accredited levees that provide a suite of approaches for analyzing flood hazards landward of levee systems.

B. The levee design standards outlined above need to be used for non-accredited levees, with the exception of raising the road to the regional flood elevation, or higher. With a non-accredited levee system, flood gates and/or temporary flood barriers can be installed during flood events to provide flood protection.

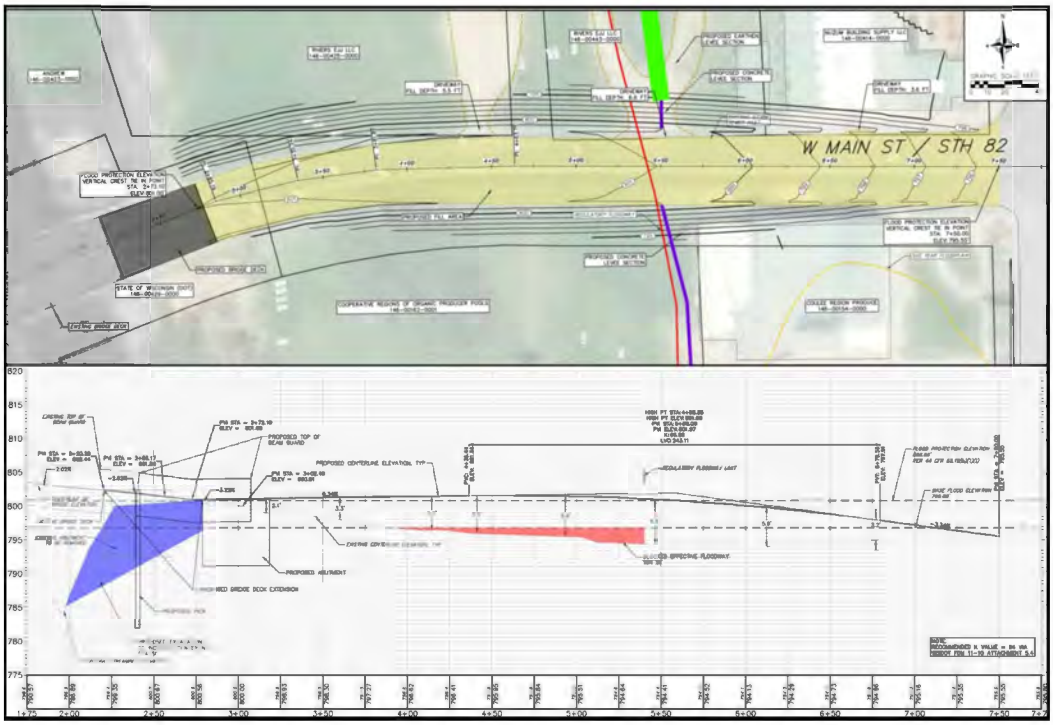
Summary of Flood Levee Highway Crossing Options

Several alternatives for the flood levee were investigated. These alternatives and the associated cost are summarized as follows:

A. Accredited Flood Levee: 500 Year Flood Protection.

This option includes raising STH 82 at the levee crossings to the 500 year flood elevation. This option fills the road overflow section of the highway. To offset the reduction of the effective flow area, a second bridge would need to be constructed adjacent to the existing bridge. As illustrated in Figure 7.4-B, the elevated roadway would tie back into the existing street grade just west of the intersection with STH 131 (Mill Street). **The estimated cost for this option is $3,200,000.**

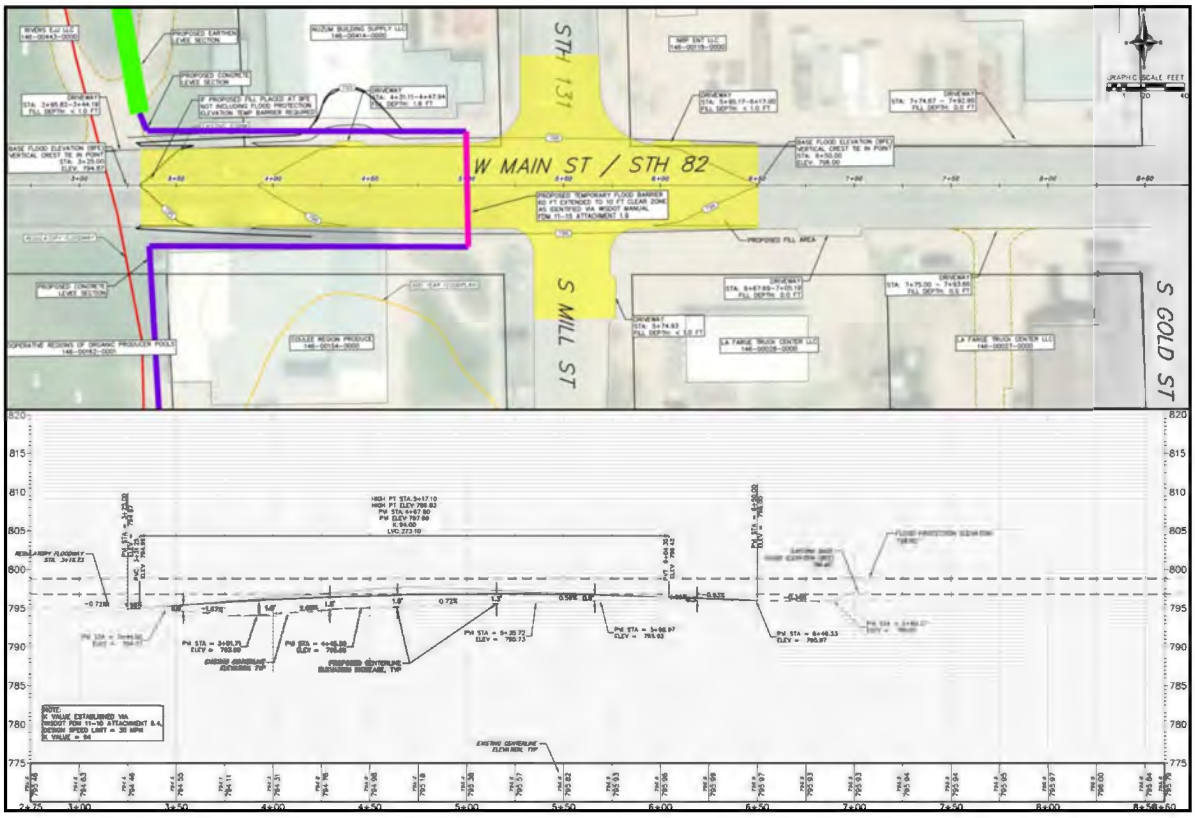
Figure 7.4-B



B. Accredited Flood Levee: 100 Year Flood Protection.

This option includes raising the elevation of the STH 82 at the levee crossing to the 100 year flood elevation. Higher flood levels would require flood gates or temporary flood barriers to be installed. The elevated roadway in this option is located entirely outside of the floodway. This option does not impact flood flows and no bridge enlargement is required. As illustrated in Figure 7.4-C, the elevated section of STH 82 extends east of the intersection of STH 131 (Mill Street). This would require the intersecting street to be reconstructed to blend into the higher intersection grade. **The estimated cost is $2,400,000.**

Figure 7.4-C



C. Non-accredited Flood Levee.

This option includes constructing the entire levee to meet the accredited flood levee design requirements, with the exception of the road crossing at West Commercial Street (STH 56 & STH 131). This crossing would need to be closed during flood events with flood gates or temporary flood barriers. This option offers flood protection to the properties behind the levee, but does require human intervention to close the opening at the highway crossing. **The estimated cost is $3,600,000.**

Conceptual plans and opinions of probable costs for the above alternatives are included in the Appendix.

The preference of the Village is to pursue the construction of an accredited flood levee system providing the 500 year flood protection. This option offers the greatest protection against future flooding, which will have a positive long term impact on the community.

The determination of the most cost effective option will require additional analysis including a cost benefit analysis to meet FEMA and the Corp of Engineers requirements. It is recommended the Village work with FEMA and the Corps to further evaluate the options and determine if a levee is feasible.

7.5 Other Infrastructure Improvements

An assessment of the existing infrastructure was conducted to identify improvements that should be addressed in conjunction with implementation of a long term economic recovery plan. The assessment included the following:

- Streets, sidewalks and bicycle/pedestrian trails;
- Wastewater collection and treatment system;
- Water supply and distribution;
- Stormwater management;
- Dry Utilities (Electric, natural gas, communications).

Section 4 of this report provides a detailed summary of the existing facilities deficiencies that should be addressed and a list of recommended improvements. The purpose of the infrastructure assessment is to identify projects that are high priority and that should be implemented in conjunction with the economic recovery plan.

Following is a list of recommended projects based on the findings of the assessment. The projects highlighted with bold are priority projects and they are a good fit for the recommended funding programs.

The infrastructure improvements for the resettlement sites are addressed in Section 7 of this report.

A detailed funding strategy for the following infrastructure improvements and the resettlement sites is included in Section 8 of this report.

The project location map and detailed Opinion of Probable Cost for each of the priority infrastructure projects is included in the Appendix C.

(*Note: Projects highlighted with bold are priority projects and/or they are a good fit for the recommended funding programs.)

Wastewater Collection System

A. Main Street (Mill Street to Maple Street) – replacement of main and laterals
B. Mill Street (Main Street to Snow Street) – replacement of main and laterals
C. Flood Proof Collection System within floodplain (manhole gaskets with bolt down lids)
D. Television of collection system to find areas of I/I
   1. Replace older collection system where I/I is identified
E. Continued work to remove illicit sump pump connections

Lift Stations

A. Provide dry land access to the Silver Street Lift Station

Wastewater Treatment Facility

A. Addition of water heater for chemical room (eyewash/drench shower)
B. Future upgrades to meet future Total Phosphorous Limits

Water Supply, Storage & Distribution

A. Main Street (Mill Street to Maple Street) – replacement of main and services
B. Well No. 2 - addition of water heater to provide tempered water for the eyewash/drench shower unit)
C. Well No. 3 – add emergency generator
D. Well No. 3 - Add an emergency drench shower
E. Investigate areas where Village has experienced water main breaks and replace mains
   1. Highland Street (Oak Street to Cherry Street)
   2. Mill Street at Adams Street
F. Loop dead end water mains where feasible
   1. Mill Street

Streets, Sidewalks and Pedestrian Paths

A. Main Street (Mill Street to Maple Street) – reconstruct with new sanitary sewer, water main, storm sewer, lighting and streetscaping (complete in conjunction with WisDOT project)
B. Continued maintenance and repair of existing street network with pulverizing and overlays, seal coating, and crack filling to extend the life of the streets.
C. Extension of sidewalk in certain areas of the Village to improve connectivity.
   1. N. Silver Street (W. Main Street to W. Penn Street)
   2. E. Penn Street (N. Elm Street to N. Oak Street)
   3. Other streets to improve pedestrian access to school
D. Continued maintenance and repair of existing sidewalks

Stormwater Management

A. Model existing system to determine capacity and recommend upgrades
B. Continued maintenance and cleaning of pipes

8.0 Implementation Plan & Funding Strategy

8.1 Implementation Plan

The three tables on the following pages identify an overview of how all of the previous recommendations and funding strategies fit together in order to proceed with implementation. Many of these programs have specific application timelines, while others are only available after natural disasters and during Presidential declaration events. Each table identifies relative timing of the identified recommendation or action item, as well as a status update for any items that may already be in progress. This Implementation Plan should be continuously updated and used as a roadmap for executing the economic recovery projects identified within this document.

Village of La Farge Economic Recovery Plan
Implementation Plan

Program	Eligible Expenses	Funding	Timeframe
EDA Economic Adjustment Planning Grant	• Economic Recovery Plan. Surplus funds can be used for Non-construction implementation costs: engineering, env. review, appraisals, regulatory permits, etc.	$200,000	Funds need to be spent by Dec. 31, 2021.
TID No. 1	• Reconstruction of Main Street • Electrical substation relocation • Main Street implementation – Business development	$1,883,660	Funds must be "spent" by April 14, 2021
CDBG PF Grant - 2020	• Reconstruction of Main Street & Utilities	$1,000,000	Village received grant award in July 2020. 2020 – 2021 Construction
WDNR CWF & SDWL	• Main Street Sewer & Water Replacement	Loan & Grant Amount TBD. 0.99% to 1.056% Interest, 20 – 30 Yr	ITA & PERF Submitted Final Applic June 2021 2020 – 2022 Construction
EDA Public Works & Econ. Adj. Grant	• Electrical substation relocation	50% of eligible costs.	Continuous application cycle. 4 to 6 month review & approval
CDBG PF Grant - Future	• Infrastructure improvement projects : sewer, water, electrical substation., WWTP, etc	$1,000,000	Village can submit a CDBG PF Applic. in 2022
USDA RD CF Disaster Grant	• Street extension for serve resettlement sites.	$150,000	Continuous application cycle, 3 to 4 month review & approval.
USDA RD Sewer & Water Loans & Grants	• Sewer & water extensions to serve resettlement sites. • Sanitary sewer & water system improvements.	Loan = +/- 60% Grant = +/-40% 1.25% to 1.375% Interest, 40 Yr Term	Continuous application cycle, 3 to 4 month review & approval.
CDBG Disaster Recovery Grant	• Create Affordable Housing for LMI – infrastructure, land acq., building construction, development incentives.	$500,000	Deadline: March 12, 2021

Village of La Farge Economic Recovery Plan
Flood Infrastructure Funding Sources

Program	Eligible Expenses	Funding	Timeframe
FEMA Hazard Mitigation Grant Program	• Design and construction of levee.	75% Fed. 12.5% WEM	Funding Dependent
U.S. Corps of Engineers (USCOE) Civil Works Program	• Design and construction of levee.	100% funding	Funding Dependent
CDBG Emergency Assistance Program (EAP)	• Construction of levee	70% grant	Funding Dependent
CDBG Disaster Recovery (DR) Program	• Design and construction of levee	Up to 100% grant	Funding Dependent
EDA Public Works & Economic Recovery Grant	• Design and construction of levee	50% or 80%	Funding Dependent
WisDOT	• Construction of State Highway modifications	TBD	Funding Dependent
Tax Increment Financing Future TID No. 2	• Design and construction of flood mitigation projects within ½ mile of district	Based on revenue	Local Match for Other Funding

8.2 Funding Strategy

The Implementation Matrix in the previous section identified a number of potential funding sources for the recommendations identified. These sources are viable opportunities to assist with paying for improvements that will have a positive impact on the community and the Downtown planning area.

Proposed Funding Strategy for Phase 1 Priority Projects

Following are recommended funding sources for the Phase 1 priority projects. The actual funding sources and allocation of funds will be confirmed during implementation.

A. Main Street Reconstruction ($2,300,000)

1. CDBG PF Grant: The Village received a $1,000,000 CDBG PF grant for the Main Street reconstruction project. The CDBG PF grant funds can be used for street, sanitary sewer, water main, storm sewer, lighting and streetscape improvements.
2. WDNR Environmental Loan Program: The Village can obtain loan funds from this program for reconstruction of the sanitary sewer, water and streets.
3. USDA Rural Development Rural Utility Services Program: The Village can obtain loan and grant funds from this program for the reconstruction of sanitary sewer, water and streets.
4. TID No. 1: TID No. 1 is projected to generate $1,883,660. The end of the expenditure period is 04/14/2021. The Village amended the TID Project Plan to include Main Street as an eligible project for the TID No. 1 surplus funds.

B. Electrical Substation Relocation ($1,747,800)

1. EDA Economic Adjustment Planning Grant: Surplus planning grant funds can be used for the preliminary design, environmental review and regulatory approvals for the electrical substation.
2. TID No. 1: TID No. 1 is projected to generate $1,883,660. The end of the expenditure period is 04/14/2021. The Village amended the TID Project Plan to include the electrical substation as an eligible project for the TID No. 1 surplus funds.
3. EDA Public Works & Economic Adjustment Grant: This program could provide a 50% grant for the construction of the electrical substation project. A higher grant amount may be available if disaster recovery funds are available, or the Village can meet hardship criteria.

C. Create new Commercial Development Outside of the Floodplain (To be Determined)

1. TID No. 1: Surplus TID No. 1 funds can be used to develop buildable sites for commercial development located within a half mile radius of TID No. 1. TID No. 1 funds may also be used to relocate existing businesses out of the floodplain. Eligible project costs include: acquisition, demolition, excavation, site improvements, infrastructure, utilities, professional services and developer incentives.

2. WEDC Community Development Investment (CDI) Grant: A $250,000 grant is available for the acquisition and relocation of the truck repair business to relocate them out of the floodplain and create a new building site on Main Street outside of the floodplain.

Funding Strategy for Flood Levee Project

Following is the recommended funding strategy for the flood levees. The process should start with submitting the Economic Recovery Plan to both FEMA and the Corps of Engineers with a request to have them conduct a cost benefit analysis.

A. **U.S. Corps of Engineers** – The U.S. Corps of Engineers Civil Works Program can fund the design and construction of flood levees. To be eligible, the levee project must meet the required cost benefit analysis to show the levee is less expensive than the cumulative damage caused by repeat flooding. Under this program, the project will be planned and implemented by the Corps of Engineers. Recommend the Village submit the adopted Economic Recovery Plan to the Corps for their consideration.

B. **FEMA HMGP** – Construction of a flood levee is an eligible cost for the FEMA HMGP program. Funding levels include 75% federal grant, 12.5% state grant & 12.5% local share. To be eligible, the project must meet the required cost benefit analysis, similar to the Corps of Engineers. The Village should submit the adopted Economic Recovery Plan to FEMA for consideration.

C. **CDBG Disaster Recovery (DR) Program** – If funding is allocated for this program in conjunction with future Presidential Disaster Declarations, the Village should apply for funding for the design and construction of the levee. This program could fund up to 100% of the eligible project costs.

D. **EDA Public Works & Economic Adjustment Program** – If other funding sources are not available, EDA has indicated this program could provide grant funding for the levee. The grant amount could range from 50% with the regular program and up to 80% if disaster recovery funds are available.

Funding Strategy for Redevelopment Sites

The proposed resettlement areas provide building sites for single family and multi-family residential development located outside of the floodplain. The development of these resettlement areas are anticipated to take place over an extended period of time. Following is a summary of public funding programs currently available for residential development. These programs may change over time and new programs may be created. As such, the Village should monitor programs to identify funding opportunities.

A. **Tax Incremental Financing (TIF)**

1. Tax Increment District No. 1 (TID No. 1) Affordable Housing Extension: TID No. 1 will be terminated in 2029. The Village can adopt a resolution extending the life of TID No. 1 for one additional year. The revenue generated for the additional revenue must be used for affordable housing. The funds can be used anywhere in the Village for a wide variety of activities including land acquisition, infrastructure, engineering, developer incentives, etc.

2. Tax Increment District No. 2 (TID No. 2): After TID No. 1 is terminated the Village can create a new tax increment district. The new TID will need to be a Mixed-Use TID, which at this time is the only TID that allows newly-platted residential development. To meet the requirements for the Mixed-Use TID, no more than 35% of the area in the TID can be used for newly-platted residential development. In addition, the residential development must have a density of at least 3 units per acre or be a conservation subdivision.

3. Affordable Housing Tax Increment District: The Wisconsin Legislature has considered creation of a new type of TID for Affordable Housing. At this time the legislation to create the Affordable Housing TID has not been approved. However, the Village should monitor this potential legislation for future use.

B. CDBG Disaster Recovery (DR) Grant

1. 2020 CDBG Disaster Recovery Grants:
   a. The State of Wisconsin has received $15.8 million of CDBG Disaster Recovery funds from the 2018 flood disaster. 80% of these funds must be spent in Dane and Vernon County. The grant funds are intended to create affordable housing for low-to-moderate (LMI) persons. Multi- family is the primary priority and single family is a secondary priority.
   b. The Wisconsin Deppartment of Administration will solicit applications for CDBG DR after HUD approves their plan. The application cycle is expected to be in early 2021.
   c. Eligible activities include: infrastructure improvements, site improvements, developer incentives and building construction to create new affordable housing.
   d. Greater than 51% of the persons occupying the new housing must be Low-to-Moderate Income (LMI).

2. Future CDBG RD Grants: The CDBG program receives an allocation of disaster recovery funds after Presidential Disaster Declarations. The Village should monitor future disaster declarations and allocation of funds. These funds can be used to construct new residential subdivisions to provide buildable sites located outside of the floodplain.

C. USDA Rural Development- Rural Utilities Services (RUS) Program

1. Eligibility
   a. La Farge's Median Household Income (MHI) = $38,214, which is 67.7% of Wisconsin's $56,439 MHI.
   b. Based on MHI, La Farge is eligible for a maximum grant of 75%; however the actual grant is based on need.

2. Sewer & Water Program Funding
   a. User Rates must exceed +/- $30 to $35 / RUE / month to Trigger Grants.
   b. Maximum grant = 75% (Due to MHI).
   c. Probable grant range = 40% to 75%.
   d. Current Loan Terms:
      - 40 year amortization term

- 1.25% fixed interest rate

e. Eligible costs: construction of new sanitary sewer and water main improvements to serve new residential development and improvements to existing sewer and water system.

Funding Strategy for Other Infrastructure & Facility Improvements

The following provides an overview of some of the public funding programs that are available to municipalities within the State of Wisconsin for infrastructure and facility projects. Each of the individual programs is focused on varying types of projects and should be considered as part of a larger funding strategy for any particular project.

Tax Incremental Financing

A. Tax Increment District No. 2 (TID No. 2)

Since the implementation of the Economic Recovery Plan will be implemented over an extended period of time, the Village should consider creation of TID No. 2 after TID No. 1 is terminated.

Community Development Block Grant (CDBG)

A. CDBG Eligibility

1. La Farge's LMI percentage is 54.81%.
2. The Village is above the 51% LMI benefit making community-wide projects eligible.
3. "Neighborhood" or "project area" projects must have an income survey prepared to document LMI benefit.

B. CDBG Grant Opportunities

1. CDBG Public Facilities (PF):
   a. 66.6% grant up to $1,000,000.
   b. As stated above, the Village received a $1,000,000 grant to help fund the Main Street infrastructure and streetscape improvements.
   c. The Village is eligible to apply every other year for additional CDBG PF grant funds. As such, the Village can apply again in 2022.
   d. Other eligible infrastructure projects include: electrical substation, streets, sanitary sewer system, water system, storm sewer, etc.
   e. Eligible projects also include fire stations, EMS, libraries, community centers, etc.
   f. Annual application deadline is in May and grant award are made in July.

2. CDBG Planning
   a. 66.6% grant up to $50,000 (Need to meet 51% LMI Requirement).
   b. Eligible projects include: Comprehensive Plan updates, Economic development plans, neighborhood redevelopment plans, etc.
   c. Applications may be submitted continuously. Non-competitive.

3. CDBG Emergency Assistance Program (EAP)
   a. 75% grants up to $500,000.

b. Projects must meet 51% LMI requirement (Or eligible under Blight Elimination or Local Urgent Need).
c. Eligible projects: Infrastructure damaged by flooding, acquisition, demolition & local match to HMGP.
d. Applications must be submitted within 90 days of disaster.

4. CDBG Disaster Recovery (DR): Availability Based on Congressional Allocation
   a. 70% of funds must be used for LMI. 30% can be used for Non-LMI.
   b. Eligible projects include acquisition, demolition relocation of flooded properties
   c. Eligible projects include infrastructure: streets, sanitary sewer, water main, storm sewer, sidewalks.
   d. Eligible projects include flood mitigation activities: levees, flood proofing, etc.
   e. Eligible projects also include fire stations, EMS, libraries, community centers, etc.

U.S.D.A. Rural Development

A. Eligibility

1. La Farge's Median Household Income (MHI) = $38,214 (67.7% of Wisconsin's $56,439 MHI).
2. Based on MHI, La Farge is eligible for a maximum grant of 75%; however the actual grant is based on need.

B. Sewer & Water Program

1. User Rates must exceed +/- $30 to $35 / RUE / month to Trigger Grants.
2. Maximum grant = 75% (Due to MHI).
3. Normal grant = 25% to 40%.
4. Current Loan Terms:
   a. 40 year amortization term
   b. 1.25% fixed interest rate
5. Eligible costs: sanitary sewer and water main improvements, including street reconstruction and storm sewer, to serve new residential development and improvements to existing sewer and water system.

C. Community Facilities Program

1. Eligible projects: Municipal buildings, fire station, libraries, public works, etc.
2. Grant availability: Minimal amounts.
3. Current Loan Terms:
   a. 40 year amortization
   b. 1.50% fixed interest rate

Wisconsin Department of Natural Resources Sewer & Water Programs

A. Clean Water Fund Program

1. Sanitary Sewer & Stormwater Management.

2. Subsidized Loans & Grants (Principal Forgiveness) (1.6% interest, 20 year term).

B. Safe Drinking Water Loan Program

1. Municipal Water System Improvements.
2. Subsidized Loans & Grants (Principal Forgiveness) (1.6% interest, 20 year term).

Parks & Recreation Programs

A. WDNR Knowles-Nelson Stewardship Grant – Annual Deadline May 1

Maximum Grant: No maximum (additional review for grants that exceed $250,000). Requires 50% local match.

The Stewardship Program: Aids for the Acquisition & Development of Local Parks (ADLP), Urban Green Space (UGS), Urban Rivers (UR) and Acquisition of Development Rights (ADR). Eligible Projects: Land acquisition, development of nature-based recreation facilities, recreation trails, development of support facilities such as access roads, parking, restrooms, signage, utility systems and lighting.

B. Federal Recreational Trails Program (RTP) – Annual Deadline May 1

Maximum Grant: $45,000 for 2020 grant cycle. $200,000 for 2021 grant cycle. Requires 50% local match. Eligible Projects: land acquisition; maintenance and restoration of existing trails; development and rehabilitation of trailside and trailhead facilities, and development of new trails. Projects must further a specific goal, be included in the SCORP or a local Outdoor Recreation Plan.

C. WDNR Recreational Boating Facilities Grant - Deadlines: February 1, 2020, June 1, 2020 & November 1, 2020.

Maximum Grants: Up to 50% of eligible costs. Largest grant in recent years = $800,000. Eligible Projects: navigational dredging, boat ramps, docks, access roads, parking, sanitary facilities, navigational aids and weed harvesting equipment.

D. Federal Land & Water Conservations Fund (LWCF) Annual Deadline May 1

Maximum Grant: No maximum. Requires 50% local match. Eligible Projects: Land acquisition; and/or development of outdoor recreation facilities including nature-based and active sports facilities. Projects must be consistent with SCORP and Local Outdoor Recreation Plan.

Appendices

A. Results of Public Engagement Process

- Stakeholder Interviews from Main Street Project
- Public Workshop No. 1
- Public Workshop No. 2

B. Municipal Facility Condition Reports

- Community Center
- Emergency Services Building
- Library
- Village Hall

C. Infrastructure Assessment

- Table 4.7-A: 2019 Pavement Surface Evaluation & Ratings
- Figure 4.7-A: Sanitary Sewer Map
- Table 4.7-C WWTF Influent Flows and BOD Loadings
- Figure 4.7-E: Water Main Map
- Figure 4.7-G: Communications Map
- Infrastructure Improvements Map (Priority 1)
- Infrastructure Opinions of Probable Cost

D. Resettlement Sites

- Community-Wide Development Map
- Site A: Concept Plan
- Site A: Opinion of Probable Cost
- Site B: Concept Plan
- Site B: Opinion of Probable Cost
- Site C: Concept Plan
- Site C: Opinion of Probable Cost
- Commercial Infill Map

E. Flood Mitigation Infrastructure

- Levee Concept Map
- 500-Year Accredited Levee Plan & Profile
- 100-Year Accredited Levee Plan & Profile
- 100-Year Non-Accredited Levee Plan
- Opinions of Probable Cost
- Power House & Substation Flood Protection Plan
- Power House & Substation Flood Protection Opinion of Probable Cost

APPENDIX A: Results of Public Engagement Process

- Stakeholder Interviews from Main Street Project
- Public Workshop No. 1
- Public Workshop No. 2

Village of La Farge
Main Street Plan
Stakeholder Interview & Focus Group Input
February 12 & 13, 2020

Interviews conducted with the following individuals:

- Kathryn Ashley-Wright, Ewetopia
- Shane Nottestad, Zip Stop
- Greg Lawton, La Farge Medical Clinic
- Deb & Earl Nelson, Truck Stop
- Debra Moore, Salon Owner
- Meaghan Gustafson, School District
- Marcy West, Kickapoo Valley Reserve
- Ron Johnson, Kickapoo Valley Reserve
- Eric Hartwig, Organic Valley
- Matt Mueller, Organic Valley
- Maggie Becker, Organic Valley
- Brad Steinmetz, Lion's Club
- Maureen Hysel, Lion's Club
- Don Foy, Lion's Club
- Kathy Appleman, LAPA, HTC Realty
- Patsy Alderson, LAPA

Public Workshop No. 1 Attendees: Fred David, Bonnie Sherman, Nick Burnard, Cheryl Purvis, Kimberly Walker, Reggie Nelson

Challenges

- DAYCARE is a major need in the area. School district looked at opportunities to house this service under their roof, but ultimately couldn't make it work due to facility constraints. Organic Valley conducted a feasibility study to provide daycare services on their campus; ultimately was too expensive. School District did feasibility study of introducing this option as part of the district, but ultimately they couldn't accommodate it within their facilities.
- Difficulty recruiting employees to this rural areas; people are unwilling to commit. Younger demographics want to live in more urban areas, like La Crosse.
- Feels like town is dying.
- Not enough population to support small businesses, especially restaurants.
- Buildings on Main Street are not appealing. Not a good selection for potential buyers to pick from.
- There is a disconnect between Organic Valley employees and Main Street – how do we get them there?
- Nothing on Main Street to attract Organic Valley workers. If there were things that catered to them, they would be there.

- Canoe landing is currently in a cow pasture. Needs to be relocated and improved. Most people get out in Rockton. Rockton & Ontario have 4-6 nice canoe landings.
- Buildings and streetscape need some aesthetic attention. Downtown corridor is run-down and unsightly. New lights, planters, etc. would be a major improvement.
- Lack of recreation opportunities for the kids. Used to have a movie theater, soda fountain, etc. Not a lot for kids to do during the summer or winter months. Library gets a lot of pressure to cater to them. A community center or Boys & Girls Club would do well.
- Concern around closing of Nuzum's. Don't want the site to deteriorate and become blighted at a key intersection to downtown.
- Water & sewer bills are exceptionally high when compared to other communities. (CHECK THIS)
- Too many service-based businesses in downtown; need more retail.
- Current building owners are trying to maintain their buildings for the lowest cost; cheapens what we do have with no design aesthetic.
- Families don't want to live here, only elderly people do. They come back to the area after they retire.
- Cost of flood insurance was too much for some businesses to move forward.
- The first impression on the west end of the downtown is the Truck Center. Some people like it, others don't.

Local Business Climate

- Pottery studio is a perfect example of a business that should be here, but it's never open.
- Hardware store is a major amenity, but worry about succession planning. Who will take over? How do we keep it from closing?
- Should grocery store and Organic Valley collaborate or combine to make more of a unique destination?
- Need a coffee shop and ice cream shop, particularly in summer time, to capture traffic moving through town.
- Everyone who goes canoeing goes to gas station after they're finished for food and ice cream. Should have other options.
- There are a few Air BnB's, but we could support more. Not much lodging; people have to go to Viroqua.
- Phil & Deb's is the only place to eat on Main Street.
- Gas station has seen 13% growth per year for nine consecutive years.
- Medical Clinic moved into their new facility in 2015 and added retail pharmacy services. Facilities have two birthing rooms (2019 = 125 births). Population served = 10-15% Amish or Mennonite population. Starting collaborative practice with University of Wisconsin to work with Amish & Mennonite genetic disorders.
- Opportunity to relocate Truck Center? Cost prohibitive, but would open up possibilities for the downtown, if floodwaters could be addressed.
- Nuzum's closing is a major hit to the community. Can that site be re-used? Concern that it will sit and become a blighted site.
- Organic Valley had 4 feet of water in their building, and talked about alternative options, but invested in flood proofing instead.

- Brozie's was starting to draw people, but it wasn't open long enough to make an impact. This business catered more to the Organic Valley employee base and saw good results of those efforts. This building is now for sale, but all of equipment has been sold.
- Flower shop opening across from bank, was previously located in Viola. Combination business with wine lounge in back and garden/patio in sideyard.
- Difficult to sell existing businesses to anyone who is familiar with current situation in downtown. How do we sell if we keep getting flooded?
- Kickapoo valley Ranch has cabins; Church Air BnB; 10-room hotel behind Zip Stop. Need more overnight accommodations.
- Businesses are leaving, but no new ones are coming. Need more businesses, period. Should also add businesses that can support Organic Valley (catering, meeting coordination, lodging, etc.)
- Can't rely on seasonal tourism for businesses to be viable. Need to be creative with business models that have alternative sources of income (online sales, combination business, etc.)

Existing Conditions

- La Farge is more of a destination community, particularly during the summer months
- In the summer, this community is a huge pass-through for traffic. This traffic needs places to stop and spend time, spend money.
- Have a large population of elderly people. Some facilities to support them, including a senior meal site and some senior living facilities (Pine Lawn Apartments, Gold St. Apartments, Bethel Parkside). Need more resources for this population. Also, this demographic can't afford for the taxes to go up, may not support things that impact their tax bill.
- Need more handicap parking areas and to make downtown more handicap accessible.
- A large home-school population in the region. Viroqua has a Waldorf school + 2 Christian-based schools.
- Making money is not a huge motivator for much of the population in this area. You don't have to compete here and hustle to have a comfortable life like you do in larger areas. That's part of the appeal.
- This is a less expensive place to live than other communities in the area, particularly Viroqua.
- Organic Valley cafeteria is now available to public during certain hours.
- 50-70% of Organic Valley employees in La Farge facility have a La Farge address; live within 10-15 minutes of La Farge.

Local Events & Tourism

- Tourism related to Amish destination lasts from Memorial Day through the end of the year.
- Huge hunting & fishing tourism base. Lots of disposable income with types of people that are attracted to the area.
- KVR has primitive camping sites (25); Village has 10 improved ones with new shower building, but do not have water hook-up/only half have electric hook-up. All sites should have water and electric access, but more improved camping sites are needed.

- Girls softball field gets a lot of smaller format activity in the summer months. Larger format games take place at the school.
- Tons of motorcycle groups go through town. Many of them stop at the Rockton Bar.
- Lots of horse trailers parked at Rockton Bar also. Not many places for horse trailers to camp, load/unload.
- 4th of July: Tractor pull, parade, all-school reunion, ball games
- Old Fashioned Christmas at the School
- Winterfest at KVR in January (800 people); standing parade in 2019 was a great example of a creative event.
- Classic car event in Mid July; started by Mark Philips at Free Methodist Church. KVR opens Old River Road for the cars
- KVR Damn Challenge Triathlon in October
- KVR in May = Trom 'n' Chomp
- KVR hosts kid's summer camps.
- KVR hosted a front-line training through Department of Tourism to train people about the resources available.
- LarryFest – Bluegrass music festival (1200-1500 people); natural amphitheater, mid-August.
- Zip Stop currently accommodates tourists the best.
- KVR hosts WinterFest. Recent comedian was a collaborative effort with Village; sold 650 tickets, received very positively by community.
- Need to have a full weekend of activities for visitors. One or two things is not enough.
- Not trying to bring more people; we already have the people. How do we capitalize on the ones we already have moving through?
- Should develop a collaborative, regional Economic Development plan to work together, rather than each community going at it alone.

Infrastructure

- Intersection of West Main St. & N. Silver St. is problematic; there's always water in the intersection, which turns into ice in the winter. The drainage ditch on the vacant lot is always wet and runs under the sidewalk, creating problems with water.
- Village needs to get utility infrastructure out of the flood area. Had to shut down power for 48 hours during flood, which impacted the entire community. Plans have been constructed to relocate the infrastructure, but is cost prohibitive.
- Alley ditch needs to be dug out south of clinic & baseball field. When this ditch is cleaned out, it keeps water off of Main Street in that area.
- Why can't community build a dyke around the town to control water? Look at Richland Center – they seem to do a good job of keeping water out.
- Opportunity to address parking issues. Can parking on one side of the street be angled instead of parallel on both sides?
- Drainage along Main Street is horrible; have to walk through water in the springtime.

Housing

- For housing construction: developer needs $200/month profit per unit on a duplex to be financially feasible. For new construction, a unit would have to charge rents of $1,100 per

unit, which isn't financially viable in this location. For a 4- or 8-plex unit, the monthly rent is reduced to $950/month, which is more marketable, but still difficult.

- New subdivision is close to built out. No more areas within Village for housing development, except a few infill parcels.
- Nothing should be built south of Main Street.
- Need to look at annexing land to the east for more residential growth.
- Multi-family rental = 10 units behind Ewetopia; one multi-family structure where old trailer park was – room for another building; some single-family home rentals.
- Suggestion that school district sell tennis courts for residential development.
- Houses are selling right now without ever going on the market. Major shortage of housing options available.
- All elderly housing is full. Lots of retirees coming to area.
- Lower income housing available in La Farge compared to other communities = larger transient population.
- People displaced by the flooding want to stay here, but there is no housing available.
- No housing available for large families.

Kickapoo Valley Reserve

- Ice caves
- 25 primitive camping sites; intentional. Don't want improved camping sites in Reserve. Wildcat Mountain has nicer camping sites. Recently moved all camping sites out of floodplain because of flash flood problems, too dangerous.
- No direct trail access to town
- Trails are for hikers, bicycles, horses, snowmobiles
- Very grassroots based; lots of community involvement.
- KVR is a strong attraction for Organic Valley to attract employees.
- Visitor's center sees 20,000 people per year.
- Facility hosts conferences & meetings. Small, but growing in use.
- Managed jointly with the Ho Chunk Nation.
- People building around the perimeter of the Reserve have already changed the character of those areas.

School District

- 240 students (4k-12th Grade)
- Enrollment has been steadily increasing for past 5 years.
- Developing a Charter School in cooperation with KVR for developing a forest school. Focusing on environmental education and place-based education.
- Facilities are aging. Cost of maintaining facilities is skyrocketing.
- Original building needs to be repurposed. It's not suitable for instruction and currently only ¼ of it is utilized, the rest sits empty. How can we turn this building into a community space? Currently working with an architectural engineering company to study alternatives.
- Goal of continuing to build community partnerships that will benefit students.
- Lack of daycare facilities on this side of Vernon County is a huge obstacle. District has a 3K program 2 morning a week and all-day 4K programming to help overcome this.

School also runs an after-school program with a sliding tuition for elementary-aged children. Had a $100K grant to operate a free program, but didn't get renewed. Lack of daycare negatively affects the district's enrollment. People enroll in school where they can also find child care.
- Higher percentage of foster families in this district compared to other districts.

Future Opportunities

- Village should be aggressive and create a Community Development Authority so they can make projects happen.
- Look at Yellow Springs, Ohio as an example of an interesting small town.
- La Farge should focus on being more of an arts/artisanal community.
- Village looked at a solar array at one point. This is something that would make it unique and self-reliant, and is an example of how we can differentiate ourselves.
- Could Nuzum's building be used for a canoe/kayak/bike rental business?
- How can we tie downtown to KVR?
- Bike trail from town to Rockton
- If there were a nice canoe landing in town, more people would use the lower Kickapoo.
- Is there an opportunity to enhance some of the existing buildings? Could a façade program do that?
- Need for a Laundromat to service the large population of campers, hunters, fishermen, etc.
- Don't want to lose Organic Valley in La Farge.
- Need for a foreign car mechanic in the area.
- Opportunity to connect all of the trails together to make a more walkable/bikeable network.
- Need water bottle filling stations around town, close to recreation areas.
- Could Village purchase Nuzum's and re-purpose it? Outdoor concert venue?
- Former Railroad bed could be a great opportunity to create a trail connection.
- Need a canoe landing with cement; currently muddy.
- History is attractive to visitors. History should be displayed on buildings, or via a historical walk.
- "The Flood Project": so much interested in what happened during flood. Could have a Real Reel Tour with 3-4 spots – you dial a number to hear a story of the flood being told by the person impacted.
- What are the specialty businesses that could support hunters, campers, hikers, canoe/kayakers, foragers, etc? Why can't La Farge be the hub for those types of businesses?
- Should promote combination businesses. What are complimentary uses that can pair up to become more viable? Proposed flower shop/wine bar is one example. What about a Laundromat/coffee shop?
- Should highlight artistic talents in town. Why don't we have a store on Main ST. for local makers to sell their products?
- Could use a General Store to cater to the camping/outdoor crowd. Or a sporting goods store with clothing, gear, camping equipment, etc.
- Look at Solen Springs on Hwy 53 in Duluth

- Need business coaching, recruitment, investment – other resources to support business start-ups.
- Look at Lanesborrough, MN. Great example community that reflects the people there (artsy, biking, etc.)
- Do ordinances allow food carts? Might be an opportunity to create a transition to service the people coming through until more permanent structures can be developed and businesses created.
- Would like to see permanent, well-designed way-finding signage throughout the downtown and community.
- WiFi in Village Park for campers.
- Desire for design guidelines for Main Street. This corridor doesn't reflect the character of the rest of the Village, but you need ordinances to implement and enforce those ideas.
- Add street trees and water stations along Main Street.
- Sandmire Park may be an appropriate place for canoe access. Improvements being made: trails, kid's fishing, etc.

APPENDIX B: Municipal Facility Condition Reports

- Community Center
- Emergency Services Building
- Library
- Village Hall

La Farge Community Center

Reviewed July 28, 2020

1.0 Executive Summary

The Community Center at 202 N. State Street was reviewed by Dave Cameron, ADCI, Jon Sandeman, ADCI, and Wayne Haugrud, Village of La Farge on the day of July 17, 2020. The review was based on visual observations. No destructive or forensic investigations were performed.

The Community Center is a two story assembly building built in 1927 by the local Freemason Society at the corner of N. State Street and E. Penn Street. The building houses a large gathering hall on the upper level and a social / dining hall on the lower level. There is a kitchen and support spaces toward the west of the building in the lower level. When converted to community center, a handicap vestibule with concrete ramp was added to the lower level with an exterior wood framed ramp added leading to the upper level. Both ramps seem to have been erected in the late 80's or early 90's. There were energy upgrades made to the building in 2005. The Boy Scouts and VFW presently use the building along with a myriad of other community requests as approved by the village.

The exterior walls of the building are load bearing composite masonry. The outer wythe of masonry is a wire struck clay brick. The low slope roof has a built up roofing system over wood trusses. There have been no floodwater issues with the building. Some groundwater seepage exists, primarily along the south lower level wall. The building is well known in the La Farge and there is community good will for it given the non-profits and community organizations it has serviced.

In general, the building is aged but in good condition. Groundwater is being managed and opportunities exist to address humidity in the mechanical room. Accessibility would be a challenge to address should the building ever go through a major renovation.

General Maintenance and Capital Improvements recommendations are summarized in section 3.0 below and include lighting upgrades, repairs to the front stair and rail, adding rails to the existing indoor ramp, upgrading exterior doors, and tuck-pointing masonry. Consultant recommended upgrades include adding exhaust to the kitchens, replacing windows, building a new exterior ramp, and repairing / refinishing the upper level wood floors.

Based on the findings as part of this review it would be reasonable to expect this building to continue to service the community effectively for the next 30 – 50 years as long as properly maintained and capital improvements recommended are implemented, although expansion opportunities on site are very limited and due to the aged construction at some point it may be deemed more cost effective to seek alternative locations to house the current functions.

2.0 Facility Condition Review

2.1. Code Summary

The original building construction was likely built to the 1921 Wisconsin Building Code as issued by The Industrial Commission of Wisconsin. There were amendments to the code each year up to the date built. In 1927 the entire code was re-published but it is unlikely that the design and construction occurred in the same year. The 1921 code was organized by occupancy type and did not separate construction type from use type. The Assembly Hall requirements of 1921 required non-combustible foundations and piers and the LaFarge Community Center fits this definition.

The building does not have a fire sprinkler system. Residential smoke alarms have been installed. The number and locations of fire extinguishers should be evaluated. An oven in the kitchen is disconnected and a stove in the prep area is also disconnected due to lack of proper kitchen hood venting. Exhaust hoods have been requested by the local building inspector. Egress lighting is present but most signs were inoperable at the time of review.

There is a restroom on each level. One is off of an office upstairs. Another is off of the kitchen downstairs. Sink heights meet ADA standards but clear floor space for ADA is lacking at the upper room. Neither has appropriate grab bars. There are no drinking fountains in the building.

2.2. Accessibility

Accessible design to accommodate people with disabilities is essential to public use facilities. It is helpful to have an understanding of the differences between the federal Americans with Disabilities Act (ADA) and the State Building Code (State Code).

In 1990 the United States Congress passed the Americans with Disabilities Act, commonly referred to ADA. Since that adoption the ADA has been revised; most currently in 2010. ADA is a federal regulation enforced by the federal government as a civil liberty regulation and is not a building code.

State Code governs new construction *and remodeling* in existing buildings and is generally not retroactive. The State of Wisconsin has accessibility guidelines through their adoption of the International Building Code and has adopted the American National Standards Institute A117.1: Accessible and Usable Buildings and Facilities.

Should the village wish to make modifications to the building some ADA upgrades may be required. Wisconsin has adopted the International Existing Building Code which allows for various alteration levels and this route could be used to define needed upgrades for ADA. Depending on the alteration some of the non-compliant conditions may not require modification.

Each subsection listed below summarizes the potential Code requirements should alterations be made to the building.

Accessible Routes and Clearances: The Accessibility Code dictates specific minimum dimensions for clearances at doorways, openings, circulation routes, cabinets, controls and plumbing fixtures. A variety of clearances and dimensions may have to be addressed in the course of any building modification solution. Areas that may be of concern include maneuvering space requirements adjacent to openings, and ramp condition, slope, and guardrails.

Accessible Toilet Facilities: The code requires accessible routes in altered buildings to contain accessible plumbing fixtures. Although the current restrooms have some of the details of an accessible restroom, they do not meet the specific criteria of the current code.

Accessible Drinking Fountains: Current guidelines for drinking fountains are to provide them in pairs, one mounted low for wheelchair users and one mounted higher for standing users.

Door Hardware: As stated above in the building modification scenario the code requires all features on an accessible route when renovated to meet the current accessibility requirements. Items such as door closers, door handles, thresholds, etc. may either have to be adjusted or replaced entirely.

2.3. Site Observations

The building rests on a corner lot and has only limited street parking. There is no drive but there is an alley behind the building. An uneven sidewalk exists on the west side of the lot but none exists on the south where the designated accessible stall is located. Street parking exists on both streets and two signs indicates ADA stalls. No striping exists on the streets and since there is no sidewalk adjacent to the south accessible parking the route is suspect. On site the front walk to the stairs is in good condition. The side walk on the south leads to the ramp and to the west entry. It is in good condition.

Landscaping and vegetation is minimal. The front entry is not covered although that is in keeping with the Masonic Temple the building originally served. The entry stairs on the west are in disrepair. Concrete is falling away and the base of the stairs is falling apart. Outdoor lighting is minimal.

2.4. Exterior Envelope

Composite masonry load bearing walls support the roof. The inner wythe of masonry is in acceptable condition. The outer wythe is wire strike dark red clay brick of king and queen sizes. Some repair work / tuck-pointing has been done and more would be recommended, specifically at window sills where separation is occurring. Foundations were not visible but some settlement is evident when walking the perimeter exterior walls of the lower level. The roof is a built-up asphaltic membrane redone in 2005. Additional roof insulation was added as part of that work. Some new vinyl windows were also installed in 2005 but many windows show their age and every wood window and wood frame should be evaluated.

All exterior doors are insulated residential grade doors with residential grade hardware. The front entry opening has plastic infill panels to allow for the door framing. The rail adjacent to the stairs is non-compliant by today's code and is a safety hazard.

Gutters should be cleaned out on the east side of the building. The flashing above the ramp addition roof was improperly installed and should be tucked into a course of masonry or into a sawcut reglet and then sealed. Wood leader / gutter supports at the top roof should be evaluated for rot and either painted or replaced.

Windows are vinyl inset in wood frames. The wood frames are decaying and need replacement. Window sills are concrete on the lower level and masonry on the upper level.

2.5. Interior Finishes, Furnishings, Equipment and Environment

2.5.1. Finishes

The upper floor of the Community Center has a hard wood floor which is worn but in fair condition. The lath and plaster walls are plastered over the masonry and painted. Ceilings are lath and plaster over the entry area and over the support spaces to the assembly hall. The assembly hall has an acoustical tile ceiling.

The lower level has vinyl composition tile flooring. Wall construction is similar to the level above. Walls of the social hall are painted and have both a painted wood wall base and painted wood chair rail. Interior walls are lath and plaster. The wall paper in the kitchen is peeling and should be replaced or removed and walls painted.

2.5.2. FF&E: Furniture / Fixtures / Equipment

There is built-in casework in the kitchen and the lower level social hall. The built in casework is aged and failing at hinges and glides. The casework in the social hall is more current in good condition. There is a three-compartment stainless sink in the kitchen which is in good condition.

2.5.3. Specialty Equipment

There is a commercial grade convection oven in the kitchen. It was disconnected at the time of the review due to Building Inspector request for code compliant hood exhaust. The gas stove was also disconnected in the kitchen for the same reason.

2.5.4. Interior Environment

Interior finishes vary throughout the building. The upper level meeting room has painted walls with limited wall coverings and stained wood wall base. The hardwood floor is in fair condition but needs to be refinished. Built-in theater style chairs around the perimeter of the hall rest on different accenting wood flooring. Surrounding spaces on the upper level are likely painted lath and plaster walls. Doors and windows have dark stained hardwood trim in good condition. The lower level social hall has tile floor and acoustic tile ceilings. Walls are painted lath and plaster over stud furring.

Both levels receive excellent daylight through the perimeter windows. The electric lights seem sufficient but a review after dark may be worthwhile. The upper hall has pendants and decorative wall sconces. The lower level hall has fluorescent lights set into the ceiling grid. The kitchen has ceiling mounted fluorescent lighting.

Temperature control is provided through a thermostat in the upper level office. A dehumidifier rests in the lower level kitchen.

2.6. Structural Observations

The structural review was based on visual observations only. The building structure is load bearing masonry that appears stable. Some tuck-pointing could be done to ensure continued life of the exterior. The front entry stair has chipped concrete and deteriorating base. The stair needs to be replaced. The lower level floor has buckled around the perimeter of the social hall. This may indicate some settlement or frost heaving of floors and walls over the years.

2.7. Building Systems Observations

2.7.1. Mechanical

The gas service runs along north side of the building and enters the lower level mechanical room behind the kitchen. There are two gas fired furnaces in a lower level mechanical room. One serves the lower level and the other serves the upper level. An AC condenser sits outside the building on a concrete pad. Air is distributed through ductwork to floor registers along wall perimeters.

There are floor mounted radiant heaters in the meeting room which are not used.

There is no kitchen exhaust and no kitchen make-up air.

2.7.2. Electrical

Power: The building has a 200-amp single phase electrical service. The main electrical panel is in the basement mechanical room. Humidity is an issue in this room. There is telephone and internet available. There is surface mounted conduit used throughout the building, typically painted to match wall color.

Lighting: The building lighting varies by space. There are incandescent, fluorescent and LED fixtures in various locations. Exit signs exist but there is no emergency lighting. Controls are by switches. Light levels seem adequate for the uses. Exterior lighting consists of residential fixtures at each entry door.

Telephone / Internet / AVI / Communications: The building has telephone and wireless internet. Both services enter the building on the northwest side of the building.

Security systems: The building has no security system.

2.7.3. Plumbing

The building has a 3/4” water service entering on the north side of the building with water meter in a floor vault in the lower level mechanical room. There is a 1994 65-gallon gas water heater with power venting. A new sump has been installed in a new closet space in the lower level social hall along the south wall.

Plumbing fixtures in the restrooms are dated, but appear operational with no leak issues observed.

Gas service enters the building along the north wall into the lower level mechanical room.

2.7.4. Fire Protection

Residential smoke alarms are installed but no formal fire alarm system is in place. The building is not sprinkled.

3.0 Capital Improvements Planning

As part of the facility review there are items that may be noted that are immediate needs or low enough cost that they can be accomplished through annual general funds. Anything typically over $10,000 would be considered a capital expenditure to be planned at a higher level. Below is a list of both including capital improvements that were reported as already discussed by the owner group and capital improvements recommended by the reviewing consultant.

3.1. Immediate Needs and General Maintenance Recommendations: 2020 dollars

Exit Lighting and Egress Lighting Upgrades	$750 - $1,000
Install Handrails at Interior Ramp	$750 - $1,000
Replace Guardrail at Main Stair	$750 - $1,500
Repair / Replace Raingutter Supports	$750 - $1,000
Install Kitchen Exhaust	$1,000 - $1,500
Install Commercial Grade Accessible Door at Ramp Lower Level	$1,500 - $1,800
Clean, Repair and Paint Wood Frames around Clad Windows	$2,000 - $4,000
Re-Finish Meeting Hall Hardwood Floor	$3,000 - $4,000
Upgrade Exterior Doors to Commercial Grade Energy Efficient (3)	$4,500 - $6,000
Masonry Tuck-Pointing and Sealant Replacement	$4,000 - $8,000
Replace Front Concrete Stair and Footings	$8,000 - $10,000

3.2. Owner Requested / Planned Capital Improvements: 2020 dollars

None Requested

3.3. Consultant Recommended Capital Improvements: 2020 dollars

New Exterior Wood Framed ADA Ramp with Landings	$10,000 - $12,000
LED Lighting Upgrades (Interior & Exterior)	$15,000 - $25,000

La Farge Community Center Context

South-West View – Front of Building

South-East View – Accessibility Vestibule and Ramp

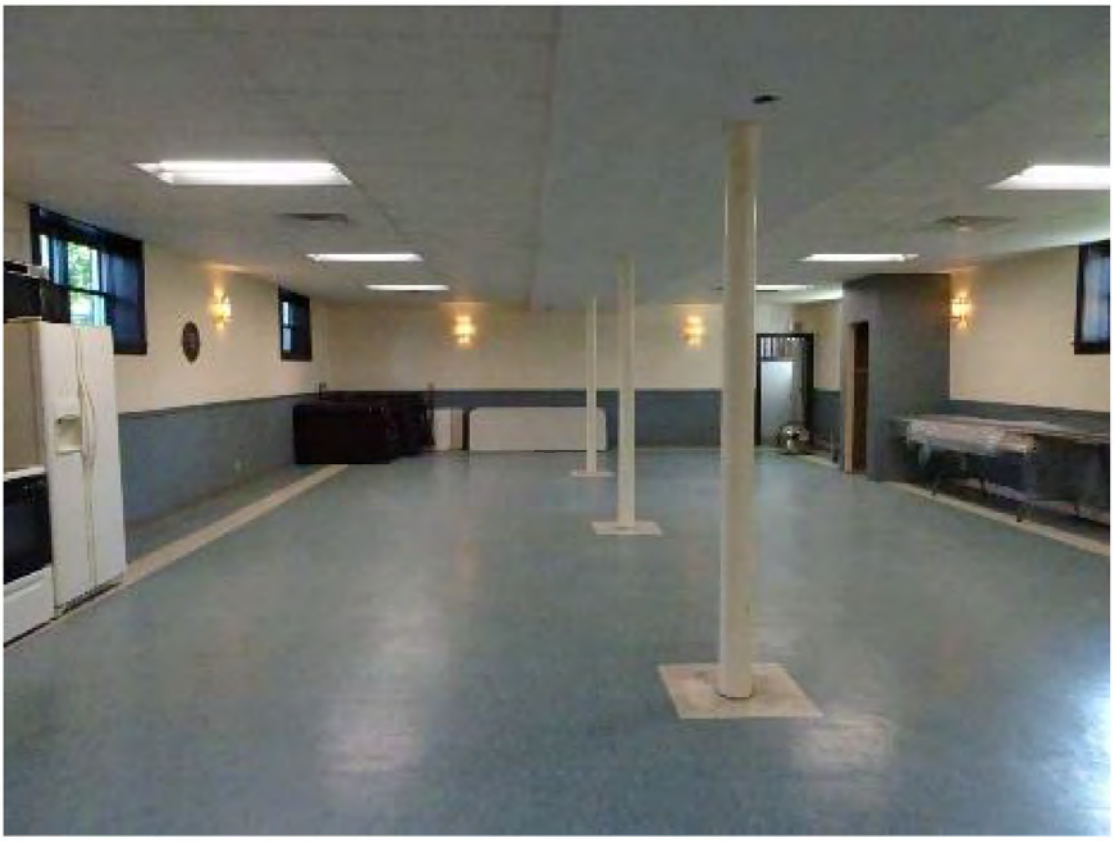
Needed Repairs – Tuck-Pointing, Window Frame Painting / Sealing

Front Stair Degradation

Upper Level Community Hall

Non-Accessible Ramp Entry Threshold

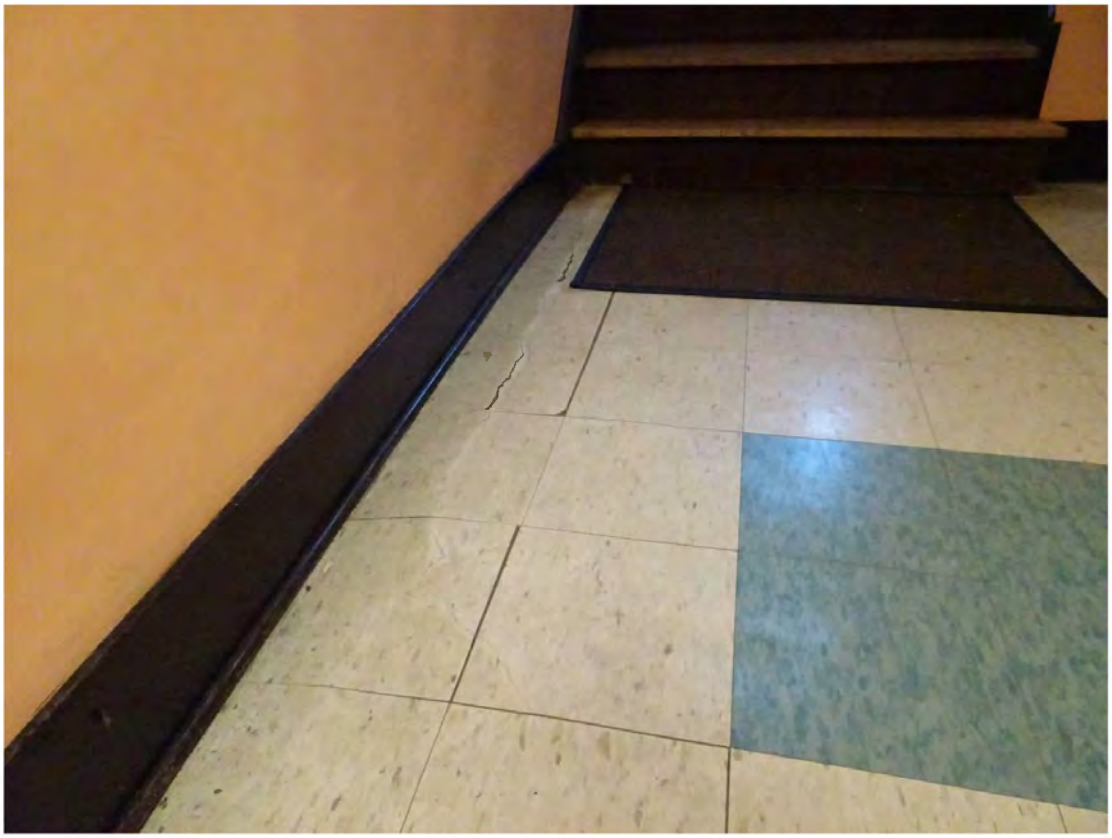
Delaminating Wallpaper



Lower Level Social Hall

Interior Ramp to Lower Level

Non-Accessible Lower Level Ramp Threshold



Buckling Basement Floor

Newly Installed Sump Pump

Hardwood Floor Needing Re-Finishing

La Farge Emergency Services Building

Reviewed July 28, 2020

1.0 Executive Summary

The Emergency Services Building at 201 S. Cherry Street was reviewed by Dave Cameron, ADCI, Jon Sandeman, ADCI, and Wayne Haugrud, Village of La Farge, on July 17, 2020. The review was based on visual observations. No destructive or forensic investigations were performed.

The Emergency Services Building is a 17,525 square foot one story building built in 2010 with grant funding assistance. The building houses the La Farge Fire Dept, La Farge Police Dept, La Farge EMS services and the Village Board facilities. It also houses offices, support spaces, and hosts voting. Openings have commercial grade doors and windows. Overhead doors to the south are aluminum framed glass doors that allow natural daylight into the apparatus storage and wash bays. Overhead doors to the north are insulated steel sectional doors which provide better protection from north winter winds.

The building is very near the Kickapoo floodplain and retention ponds to the south are immediately adjacent to a wetland. The asphalt parking lot has 40 stalls, two of which are designated accessible. An additional 10 stalls were planned to the west side of the building but were never striped.

There is a national weather service precipitation monitoring station on site.

In general, the building is in great condition as it is reasonably new. While close to the flood plain, the recent flood remained in the parking lot and did not breach the building.

General Maintenance and Capital Improvements recommendations are summarized in section 3.0 below and are limited to minor maintenance items such as parking lot seal coating and striping.

Based on the findings as part of this review it would be reasonable to expect this building to continue to service the community effectively for the next 30 – 50 years. There is opportunity for expansion on site.

2.0 Facility Condition Review

2.1. Code Summary

The building design was governed by the 2006 International Building Code, as adopted by the State of Wisconsin. Occupancy is a non-separated mixed use including S-1: Storage and B: Business. The building is fully sprinkled. There is a small kitchenette with heat exhaust.

The construction is Type IIB, non-combustible exterior walls, as evident with the precast walls. Wood trusses rest atop the precast panels with shingled finish. Egress lighting is properly installed at the egress routes. There is an accessible route from ADA parking into the facility and to all primary functions. Sanitary fixtures are in good condition. The building has smoke alarms, fire alarms with strobes, and a full sprinkler system.

2.2. Accessibility

Accessible design to accommodate people with disabilities is essential to public use facilities. It is helpful to have an understanding of the differences between the federal Americans with Disabilities Act (ADA) and the State Building Code (State Code).

In 1990 the United States Congress passed the Americans with Disabilities Act, commonly referred to ADA. Since that adoption the ADA has been revised; most currently in 2010. ADA is a federal regulation enforced by the federal government as a civil liberty regulation and is not a building code.

State Code governs new construction *and remodeling* in existing buildings and is generally not retroactive. The State of Wisconsin has accessibility guidelines through their adoption of the International Building Code and has adopted the American National Standards Institute A117.1: Accessible and Usable Buildings and Facilities.

Should the village wish to make modifications to the building few ADA upgrades would be required.

Each subsection listed below summarizes the potential accessible code impacts, should alterations be made to the building in the future.

Accessible Routes and Clearances: The Accessibility Codes dictates very specific minimum dimensions for clearances at doorways, openings, circulation routes, cabinets, controls and plumbing fixtures. A variety of clearances and dimensions may have to be addressed in the course of any building modification solution. The only clearance related item noted is the height of the counters in the kitchen and whether a serving counter may be warranted in the future that does not exceed the ADA height of 34" above finish floor.

Accessible Toilet Facilities: The code requires accessible routes in altered buildings to contain accessible plumbing fixtures. The current restrooms are in very good shape but the standards for shower size and clear floor space may warrant review.

Accessible Drinking Fountains: Current guidelines for drinking fountains are to provide them in pairs, one mounted low for wheelchair users and one mounted higher for standing users. The building provides for this.

2.3. Site Observations

South Cherry Street is on the east of the building site. The building itself faces south onto the parking lot with view of the valley to the south. An asphalt paved access drive runs along the north of the building. The parking lot wraps around three sides; east, south, and west. On the east there is an expanse of greenspace between the building and the east access drive and parking. Storm water sheet drains to the retention ponds to the south. The main covered entry to the building is on the south side.

Walks are in good condition. The asphalt parking lot needs resealing and re-striping. Cracks should be sealed with traffic sealant applied between the asphalt and the sidewalk at the main entry walk.

Landscaping around the building is minimal but well maintained. Rock mulch provides a border around the building. Condensers, emergency generator, gas meter, and electrical panel all rest in the rock mulch areas.

2.4. Exterior Envelope

Exterior walls are precast concrete and rest on concrete frost walls. There is some cracking in south facing panels. The entry vestibule is built of storefront glazing with a sloped standing seam metal roof. All other roofs are shingled. The east and west gable ends of the building have metal panel above the precast wall panels. The metal panels are in good condition. Louvers on the exterior are in good condition.

Doors and windows are commercial grade. The front entry is aluminum storefront, in good condition. Rear doors are painted steel, in good condition. Flashing and Sealants on the building are in good condition. Wall pack light fixtures illuminate the building exterior and drives.

2.5. Interior Finishes, Furnishings, Equipment and Environment

2.5.1. Finishes

The Fire department apparatus bay is surrounded by precast concrete panels with epoxy floor and metal liner panel ceiling. All in good condition. The village board room area has poured epoxy flooring. Toilet rooms have hard tile floor finish. Walls are painted and ceilings are acoustic ceiling tile. The showers have wall tile and grab bars. Wood veneer doors are in good condition. The EMS bay has three walls of precast concrete and one of concrete masonry. Concrete masonry is unpainted and ceiling is metal liner panel similar to the Fire department apparatus bay. The EMS bay also has a wood framed storage room.

2.5.2. FF&E: Furniture / Fixtures / Equipment

Wood casework in the kitchen is in good condition. The refrigerator and stove in the kitchen are in good condition. Counters with low storage reside in both Fire and EMS bays and are in good condition.

2.5.3. Specialty Equipment

There is a CEVS (Captured Exhaust Ventilation System) system in the Fire Department apparatus bay. Good connections and operation were reported. The Fire Department also

has an industrial washer and equipment drying cabinet. There is no fire extinguisher re-charge station on site. There is a pigtailed cylinder cascade system used to re-charge SCBA (self-contained breathing apparatus) air tanks.

The EMS bay has dedicated washer and dryer laundry units along with a wash sink. These are tied to a dedicated 50-gallon electric water heater with softener. There are eyewash stations in both Fire and EMS bays.

The wash bay has an AO Smith power wash system along with a utility sink. Piping in the wash bay is rusting and not the appropriate material for the corrosive environment. Piping here should be galvanized or primed and epoxy painted.

2.5.4. Interior Environment

Daylighting in the bays is excellent. The glazed overhead coiling doors allow natural light to penetrate well into the interior. Temperature control was reported satisfactory. Floor drains should have water poured into them every 3-4 months to prevent dry up and odor. Acoustics in the office / village board space was excellent.

2.6. Structural Observations

Primary structure appears stable. There are some cracks in the south facing precast near windows. Those should be monitored by staff. Steel tubes which were attached to the precast for bearing of trusses should be refinished / re-painted as a maintenance task.

2.7. Building Systems Observations

2.7.1. Mechanical

High efficient, sealed combustion, natural gas furnaces providing heating and cooling in the office / village board area. Overhead radiant heat is provided in the garage areas. Restrooms and kitchen have exhaust fans. Grease exhaust in the kitchen is not needed. There is a second furnace in the Wash bay and two gas fired boilers for power washing.

2.7.2. Electrical

Power: There is 120/208 600 amp service to the building. Panel LB uses 120/208 volts fed from Panel DP. A 200 kw diesel emergency generator sits on a pad north of the building and is sized to provide emergency power to entire facility plus the nearby sanitary lift station.

Lighting: There is a dedicated lighting control panel in the mechanical room. Most lighting in the building is fluorescent. In the garage bays the primary lighting is high-bay fluorescent suspended from the structure above. There are occupancy sensors in the restrooms. Exterior lighting is high pressure sodium exterior wall packs.

The building has security lighting outside the building and near exits inside.

Telephone / Internet / AVI / Communications: Telephone and Internet are available in the building. Annunciators exist throughout the building and connect to Vernon County Dispatch.

Security systems: There is no security system in the building or on site.

2.7.3. Plumbing

A 6” water service enters the building, divided into two 4” services; high flow and low flow.

Both the 50-gallon water heater in the mechanical closet and the 55-gallon heater in the EMS bay are 10 years old. There are hose bibs inside the apparatus and wash bays and in three locations on the exterior of the building.

A 1 ¼” gas line enters the north of the building where the meter rests.

2.7.4. Fire Protection

The building has a monitored fire sprinkler system with fire alarms, and smoke detection. The fire alarm panel is in the mechanical room.

3.0 Capital Improvements Planning

As part of the facility review there are items that may be noted that are immediate needs or low enough cost that they can be accomplished through annual general funds. Anything typically over $10,000 would be considered a capital expenditure to be planned at a higher level. Below are list of both including capital improvements that were reported as already discussed by the owner group and capital improvements recommended by the reviewing consultant.

3.1. Immediate Needs and General Maintenance Recommendations: 2020 dollars

Traffic Sealant Between Walks and Asphalt Parking	$250 - $500
Strip, Prime, Paint Wash Bay Gas Piping	$500 - $750
Parking Lot Stall and Access Isle Striping	$750 - $1,000
Asphalt Parking Lot Crack Fill and Seal Coat	$8,000 - $10,000

3.2. Owner Requested / Planned Capital Improvements: 2020 dollars

None Requested

Owner is setting money aside now for new roof as needed in future

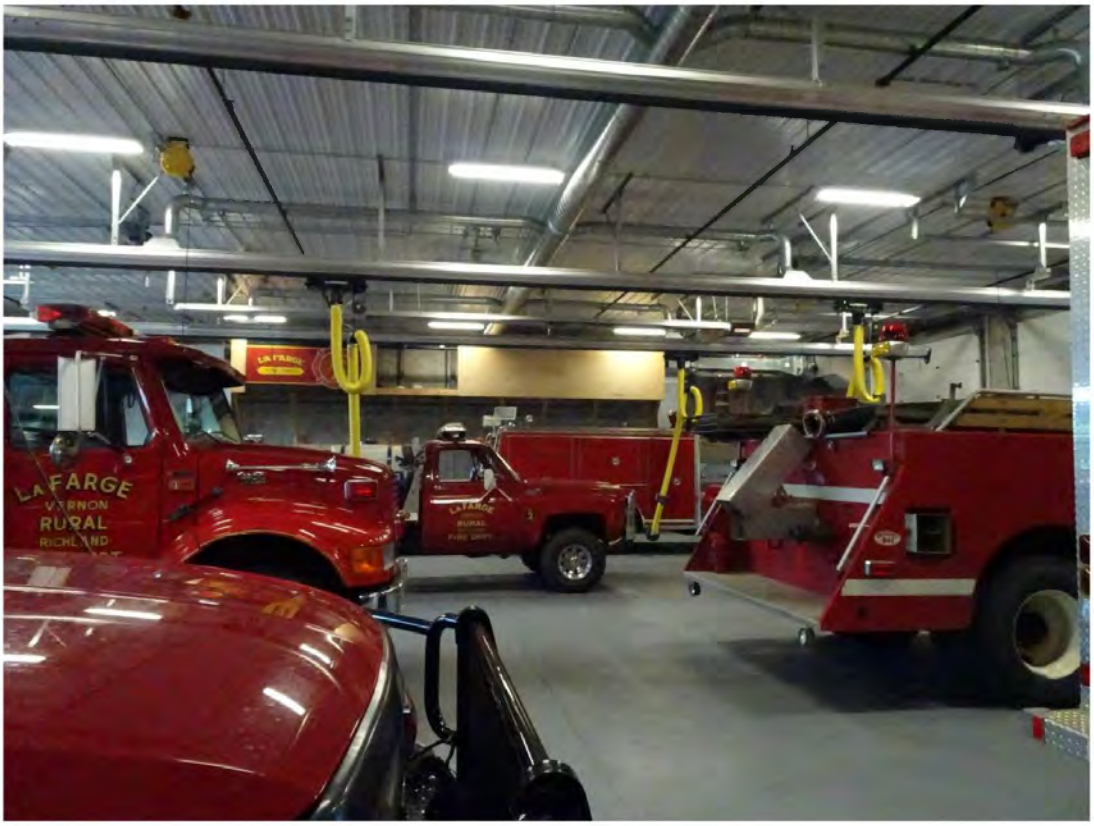
3.3. Consultant Recommended Capital Improvements: 2020 dollars

LED Lighting Upgrades (Interior & Exterior)	$45,000 - $60,000

La Farge Emergency Services Building Context

South-East View – Main Entry

North-East View – Back Entries and Emergency Generator

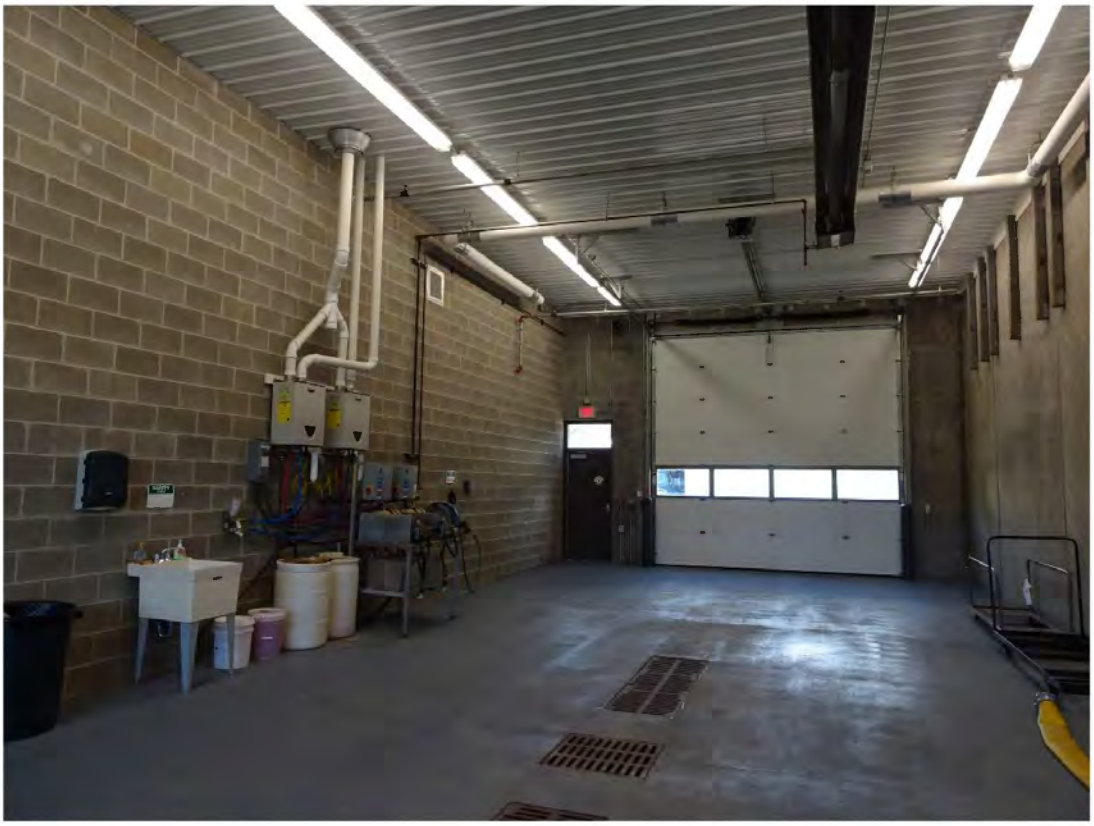


Interior View – Fire Dept Apparatus Bays

Interior View – Board Room

Interior View – Staff Use Kitchen

Interior View – EMS Apparatus Bays



Interior View – Vehicle Wash Bay

Lawton Memorial Library

Reviewed July 28, 2020

1.0 Executive Summary

The Lawton Memorial Library located at 118 North Bird Street was reviewed by Dave Cameron, ADCI, Jon Sandeman, ADCI, and Wayne Haugrud, Village of La Farge on July 17, 2020. The review was based on visual observations. No destructive or forensic investigations were performed.

The original library was built new in 1989. In 2016 an addition was done to the building increasing its space by 2000 square feet. The building is in a residential area complimenting the park and adjacent to downtown. In 2019 the village invested in photovoltaic solar panels as an energy upgrade.

The building is roughly a block from the flood plain, and while flooding has not affected the building, there is a surface water drainage issue along the north side of the site.

In general, the building is in great condition as the recent addition included renovation and upgrades to the entire existing building. General Maintenance and Capital Improvements recommendations are minimal and summarized in section 3.0 below and include only the site grading.

Based on the findings as part of this review it would be reasonable to expect this building to continue to service the community effectively for the next 30 – 50 years as long as properly maintained and capital improvements recommended are implemented, however, building and parking expansion opportunities on site are limited without impacting the park space.

2.0 Facility Condition Review

2.1. Code Summary

The 4,100 square foot building is Construction Type VB for unprotected wood light frame construction. The Occupancy is Assembly A-3 which is standard for libraries. The building does not require sprinklers due to the size and occupancy type.

Exit and egress lighting is current and properly located at exits and life safety egress paths. Sanitary fixture counts and accessibility in the restrooms is satisfactory since the 2015 addition brought the facility up to current code. Fire extinguishers are near located at the building entry / exit locations.

2.2. Accessibility

Accessible design to accommodate people with disabilities is essential to public use facilities. It is helpful to have an understanding of the differences between the federal Americans with Disabilities Act (ADA) and the State Building Code (State Code).

In 1990 the United States Congress passed the Americans with Disabilities Act, commonly referred to ADA. Since that adoption the ADA has been revised; most currently in 2010. ADA is a federal regulation enforced by the federal government as a civil liberty regulation and is not a building code.

State Code governs new construction *and remodeling* in existing buildings and is generally not retroactive. The State of Wisconsin has accessibility guidelines through their adoption of the International Building Code and has adopted the American National Standards Institute A117.1: Accessible and Usable Buildings and Facilities.

Should the village wish to make modifications to the building some ADA upgrades may be required. Since this building was recently upgraded in 2015, any ADA upgrades would likely be minimal.

Wisconsin has adopted the International Existing Building Code which allows for various alteration levels and this route could be used to define needed upgrades for ADA.

Each subsection listed below summarizes the potential accessible code impact requirements should alterations be made to the building in the future.

Accessible Routes and Clearances: The Accessibility Codes dictates very specific minimum dimensions for clearances at doorways, openings, circulation routes, cabinets, controls and plumbing facilities. Very few clearances or dimensions would need to be addressed in any building modification.

The Circulation Desk has 34" counter for accessibility which meets current accessibility codes.

Accessible Toilet Facilities: The code requires accessible routes in altered buildings to contain accessible plumbing fixtures. Restrooms are not a concern at this time.

Accessible Drinking Fountains: Current guidelines for drinking fountains are to provide them in pairs, one mounted low for wheelchair users and one mounted higher for standing users. The library presently has this arrangement.

Site Considerations: There is one accessible parking stall on the street in front of the library. A curb ramp from the street provides access to the public walk leading to the public building entry. Thresholds along the accessible route are compliant. There is an automatic door for assisted entry.

2.3. Site Observations

Landscaping was upgraded with the 2015 work. A raingarden to the north of the building was added and remains in good condition. Grading around the building from East to West is insufficient to direct storm water away.

Parking stalls on the street west of the building are not striped. To be compliant with the 2016 permit documents the stalls should be striped. Signage for accessible parking is in place.

The main entry is covered and lit.

2.4. Exterior Envelope

The outside of the library is finished with engineered wood paneling with a base of natural thin stone veneer. These materials are over sheathing which is attached to the insulated wood stud walls. The roof is wood trusses with asphalt shingles. There is insulation within the space of the wood trusses similar to residential construction. Doors and windows have heavy engineered wood trim.

The slab on grade floors rest on concrete frost wall foundations. All exterior finishes are in good condition with no issues witnessed that need attention.

2.5. Interior Finishes, Furnishings, Equipment and Environment

2.5.1. Finishes

Interior finishes are in very good condition. Walls are painted and doors and windows have stained wood trim which echoes the wood trim on the exterior of the building. Flooring is primarily wood grain LVT (luxury vinyl tile) in the circulation spaces, the Library Commons, and the Meeting Room. The Library Collections space is carpeted. The restrooms have hard floor and wall tile. Stone veneer from the exterior re-appears on the interior.

There are drop ceilings which define the children's reading area and the circulation desk.

2.5.2. FF&E: Furniture / Fixtures / Equipment

Considerable casework and custom built-in features reside at the circulation desk. These features are in good condition and utilized extensively. There is also built-in casework in the meeting room, work room / office, and storage.

2.5.3. Specialty Equipment

The book drop is located within a fire rated enclosure that protects against vandalism.

There are wall mount "Tesla" solar power system transformers on the walls above the public access computers.

2.5.4. Interior Environment

Light levels are appropriate. All fixtures are LED technology to save energy. It was reported that there have been some failed fixtures that have required replacement.

Temperature control was reported as acceptable and easy to moderate.

Acoustics seem appropriate for a library environment. The carpet and acoustic ceiling tile assist in dampening sound.

2.6. Structural Observations

The structural review was based on visual observations only. Structure appears stable with no concerns observed or reported.

2.7. Building Systems Observations

2.7.1. Mechanical

Two gas fired furnaces provide central air to two zones of the library. Two new (2016) condensers sit on grade outside the south side of the building. Fresh air intakes are on the east exterior wall. Restrooms have dedicated exhaust fans.

2.7.2. Electrical

Power: There is a 175-amp electrical service to the building, supplemented by the solar panels that were added to the building roof in 2019. Twenty percent of the building needs are met with the solar power including heat, power to the circulation desk, emergency lighting, charging outlets, and office computers.

Lighting: All lights inside the building are LED. 2x4 lights are set into ceiling panels and can lights supplement them and illuminate traffic areas. Emergency lighting is achieved with select fixtures. Exit and egress lighting is present and properly located. Outside the building there are soffit lights around the building perimeter. There are decorative pendant fixtures over the children's reading area. Light levels were reported acceptable at the time of visit.

Telephone / Internet / AVI / Communications: There is telephone and internet available in the building. Internet is available to patrons via public access computers and Wi-Fi access.

Security systems: There are security cameras that monitor the building entries with 10-days of on-site monitoring storage. There are no security related alarms or off-site monitoring.

2.7.3. Plumbing

The building has a 3/4" water service line that enters the south mechanical room. There is a 10-gallon electric water heater on a high shelf in the same room.

The restrooms have porcelain floor mounted toilets and porcelain wall hung sinks. Sinks and mirrors are compliant with accessibility requirements.

There are two hose bibs outside the building. One on the north of the building near the garden and the other is on the south of the building.

Gas service with meter enters the south side of the building.

2.7.4. Fire Protection

There is no fire alarm system or sprinkler system in the building. There are smoke alarms in the mechanical and storage rooms.

3.0 Capital Improvements Planning

As part of the facility review there are items that may be noted that are immediate needs or low enough cost that they can be accomplished through annual general funds. Anything typically over $10,000 would be considered a capital expenditure to be planned at a higher level. Below are lists of both including capital improvements that were reported as already discussed by the owner group and capital improvements recommended by the reviewing consultant.

3.1. Immediate Needs and General Maintenance Recommendations: 2020 dollars

Front Tree Trimming	$750 - $1,000

3.2. Owner Requested / Planned Capital Improvements: 2020 dollars

Address Site Stormwater Controls	$5,000 - $10,000

3.3. Consultant Recommended Capital Improvements: 2020 dollars

None Recommended

Lawton Memorial Library Context

South-West Exterior View – Library Front, Tree Trimming Needed

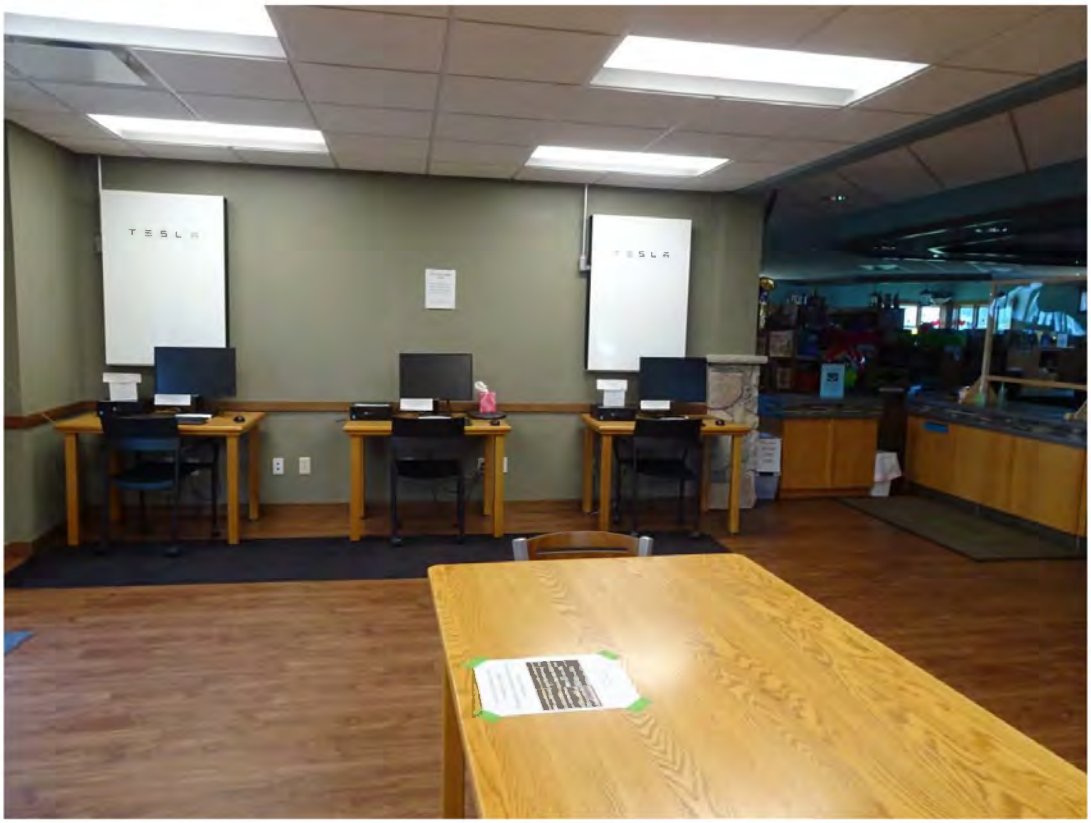
North Exterior View – Patio Area, Site Grading Needed

Interior View - Circulation desk and stacks area

Interior View – Children's Area

Interior View – Stacks Area

Interior View – Meeting Room, Program Space



Interior View – Public Access Computer Workstations

La Farge Village Hall

Reviewed July 28, 2020

1.0 Executive Summary

The Village Hall at 105 West Main Street was reviewed by Dave Cameron, ADCI, Jon Sandeman, ADCI, and Wayne Haugrud, Village of La Farge on the day of July 28, 2020. The review was based on visual observations. No destructive or forensic investigations were performed.

The Village Hall is a zero lot line building which is one story toward Main Street and two stories towards the south. The second story of the two story portion is rented out to a private residential tenant. The two story portion of the building also has a basement. The building was reported to have been built in 1953 and underwent energy upgrades in 2005 and a village hall "front of house" remodel in 2011. Load bearing masonry walls support the two low slope roofs. As part of the energy upgrades the east exterior walls received insulation and metal panels. The lower "low slope" roof drains to the east.

In general, the building is well maintained but aged. The basement has a trench around the exterior perimeter to capture foundation seepage that comes in through the aged perimeter walls. The residential occupancy above the village hall should be separated by a fire rated barrier.

General Maintenance and Capital Improvements recommendations are summarized in section 3.0 below and include masonry repair, window replacement, lighting upgrades, window frame repair, accessibility upgrades, and parking.

Based on the findings as part of this review it would be reasonable to expect this building to continue to service the community effectively for the next 10 – 15 years as long as properly maintained and capital improvements recommended are implemented. Considering expected ongoing maintenance costs and that expansion opportunities on site are limited some planning ahead for a future facility is recommended.

2.0 Facility Condition Review

2.1. Code Summary

The building is Construction Type IIIB for load bearing masonry. Occupancy is mixed, non-separated uses of Business for Office use and Residential. The building is not sprinkled. Smoke alarms are installed. One fire extinguisher exists in the rear storage room.

There is a single dated restroom on the main level that lacks accessible qualities like grab bars and clearances. This is a shared employee / public toilet room. Service counters at the front of the office do not meet ADA requirements for ADA service height.

The stair to the basement is narrow and the handrail does not meet current code requirements. The "ceiling" over the stair to the basement is the stair to the apartment above. Daylight can be seen through stair members which have settled. Current fire code requires a rated separation between the uses on the first floor and the residential tenant above. The present condition is a fire hazard that affects life safety egress conditions.

The condition of the first floor ceiling is also a fire hazard. A fire rated separation should exist between uses. Currently there is open, unprotected wood framing.

2.2. Accessibility

Accessible design to accommodate people with disabilities is essential to public use facilities. It is helpful to have an understanding of the differences between the federal Americans with Disabilities Act (ADA) and the State Building Code (State Code).

In 1990 the United States Congress passed the Americans with Disabilities Act, commonly referred to ADA. Since that adoption the ADA has been revised; most currently in 2010. ADA is a federal regulation enforced by the federal government as a civil liberty regulation and is not a building code.

State Code governs new construction *and remodeling* in existing buildings and is generally not retroactive. The State of Wisconsin has accessibility guidelines through their adoption of the International Building Code and has adopted the American National Standards Institute A117.1: Accessible and Usable Buildings and Facilities.

Should the Village wish to make modifications to the building some ADA upgrades may be required. Wisconsin has adopted the International Existing Building Code which allows for various alteration levels and this route could be used to define needed upgrades for ADA. Depending on the alteration some of the non-compliant conditions may not require modification.

Each subsection listed below summarizes the potential Code requirements should alterations be made to the building.

Accessible Routes and Clearances: The Accessibility Codes dictates very specific minimum dimensions for clearances at doorways, openings, circulation routes, cabinets, controls and plumbing facilities. A variety of clearances and dimensions may have to be addressed in the course of any building modification solution. Areas that may be of concern include maneuvering space requirements in the restroom and threshold condition at the front entry.

Accessible Toilet Facilities: The code requires accessible routes in altered buildings to contain accessible plumbing fixtures. Although the current restroom has some of the details of an accessible restroom, it does not meet the specific criteria of the current code.

Accessible Drinking Fountains: Current guidelines for drinking fountains are to provide them in pairs, one mounted low for wheelchair users and one mounted higher for standing users.

Door Hardware: As stated above in the building modification scenario the code requires all features on an accessible route when renovated to meet the current accessibility requirements. Items such as door closers, door *handles*, thresholds, etc. may either have to be adjusted or replaced entirely.

2.3. Site Observations

The building is downtown and considered a zero-lot line building, meaning that building walls may join by “party wall” on adjoining property lines and be constructed tight to front and back property lines as long as properly rated and openings are protected or limited. There is no open front site aside from the public walk in front of the building and the short ramp at the entry. The ramp at the entry has cracked concrete. The entry ramp is not compliant with current code and does not provide a flat landing at door entry or door pull-side clearances.

There is no dedicated parking aside from public parking on the street. There is no accessible parking available. The entry is covered at the door by being recessed into the face of the building.

2.4. Exterior Envelope

The walls of the building are brick and block composite set on concrete foundation walls. Insulation and metal panels were added to the east as part of and energy upgrade incentive project.

Windows are either wood windows in wood frames or steel frame, many with single pane glazing. The wood windows and frames have dry rot which needs attention. All single pane windows should be replaced with insulated dual pane. The rear exit lacks a proper exit stoop. The landing at the door is exposed plywood and top of masonry foundation walls. This should have a pan-flashing system installed with proper surface finishes and should have a proper set of steps to grade or ramp.

The basement level has a perimeter trench at floor edge to collect foundation wall seepage and properly direct water to the sump pit. Interior rigid wall insulation was applied to the perimeter walls as part of the energy upgrades in 2005. The basement is very clean but damp. Exposure to dampness is corroding piping and affecting floor joists.

Exterior Doors are insulated metal residential doors. Door hardware is residential grade. Interior doors vary in material and style. Some are painted wood. Some are laminate. All have residential grade hardware, most of which does not comply with accessibility standards.

It is reported that residential tenant windows upstairs leak under some driving rain conditions.

Exterior walls do not appear to be cavity wall construction and no weeps were observed in the masonry walls or veneer. This is a concern that ongoing weather exposure can lead to dampness bleeding to the interior finishes and deteriorating wall insulation or causing moisture damage or molding. To minimize this it is highly recommended to keep up with a regular schedule of sealing brick veneer and painting concrete masonry.

2.5. Interior Finishes, Furnishings, Equipment and Environment

2.5.1. Finishes

In 2011 the remodel added wood stud walls around the perimeter of the front public space. Drywall was applied with a wood wainscot. The drywall and wainscot are in good condition.

The back of house spaces are largely unfinished with exposed block walls, painted plywood floors, and exposed floor joists overhead. The back of house finish conditions are poor.

The basement has painted brick walls and exposed insulation on exterior walls. The furnaces are in a vault room where the original boilers may have resided. The chimney in this room has evidence of water seeping in from above. This should be reviewed at the roof level to prevent ongoing water damage to the perimeter framing attached to the chimney.

2.5.2. FF&E: Furniture / Fixtures / Equipment

Casework in the public areas is in very good condition. The reception counter, while not accessibility compliant, is in good condition. There are two storage counters with cabinets are against the south wall also in good condition.

The back of house area has cabinets and a countertop with sink. These are in poor condition. Wiring and conduit is strung haphazardly and cuts through joists overhead. The integrity of the joists appears compromised.

2.5.3. Interior Environment

Light levels are acceptable in the remodeled public areas. There were no complaints about temperature control. The basement is humid and would benefit from a dehumidifier.

Acoustics in the public area were fine with no privacy concerns reported.

2.6. Structural Observations

There were minor structural issues around the envelope of the building. Tuck-pointing of the masonry at the front of the building is recommended. Grout has eroded away at window sills and should be addressed to prevent water infiltration at sills and walls. The concrete block at the stair of the rear exit should be filled and covered with a threshold or combination of tread and a threshold.

There is dry rot to some of the joists in the basement and neither the stair to the basement nor the stair to the residence above appear completely stable.

The multiple conduit and wiring penetrations through back of house floor joists is a concern that should be reviewed further.

2.7. Building Systems Observations

2.7.1. Mechanical

One gas fired furnace exists in the basement “vault” provides forced air heating and cooling. AC compressor sits outside on grade to the east.

The Toilet room has an aged exhaust fan.

2.7.2. Electrical

Power: The building has a 200-amp single phase electrical service. 100-amp service runs to the tenant upstairs. Panels for both are in the first floor back of house area. There is no backup power.

Lighting: Fluorescent fixtures are typical in the public area. Back of house has both suspended incandescent bulbs and suspended fluorescent strip lighting.

Exit lights exist at the front and rear exits as well as above the door between public and back of house spaces. Light levels in the public area are appropriate. Back of house lighting levels are dim and not appropriate for performing fine tasks.

Telephone / Internet / AVI / Communications:

Telephone and internet are available in the facility. There is no public internet or wi-fi access.

Security systems: Two cameras exist outside the front entry.

2.7.3. Plumbing

Building has a 3/4" water service. There are two meters, one for the Village Hall and another for the residential tenant space above.

The Village Hall has a 40-gallon water heater which sits in the basement. The heater was installed in 2007.

Fixture types in the restroom are porcelain. The toilet is floor mounted. The sink rests atop a residential cabinet. The sink does not meet current accessibility standards. The room does not have accessible fixture clearances.

Building has a 3/4" gas service entering the rear of the building. AC compressor sits on grade to the east of the building on village property.

2.7.4. Fire Protection

There are battery powered smoke detectors and one CO^2 detector.

3.0 Capital Improvements Planning

As part of the facility review there are items that may be noted that are immediate needs or low enough cost that they can be accomplished through annual general funds. Anything typically over $10,000 would be considered a capital expenditure to be planned at a higher level. Below are list of both including capital improvements that were reported as already discussed by the owner group and capital improvements recommended by the reviewing consultant.

3.1. Immediate Needs and General Maintenance Recommendations: 2020 dollars

Fix Leaking Plumbing Pipes	$250 - $500
Replace Back Exterior Light Fixture	$250 - $500
Perimeter Caulking and Sealants Allowance	$500 - $750
Replace Existing Single Pane Window on South Façade	$500 - $750
Front Window Jamb Repairs and Sealants	$500 - $1,000
Tuck-Pointing Masonry Façade	$750 - $1,000
Structural Review of Stairs, Floor Joists	$1,000 - $1,500
Review Chimney Integrity – Fix Potential Leak Conditions	$1,000 - $1,500
Engineering Assessment of Floor Fire Separation	Needs Further Review

3.2. Owner Requested / Planned Capital Improvements: 2020 dollars

None Requested

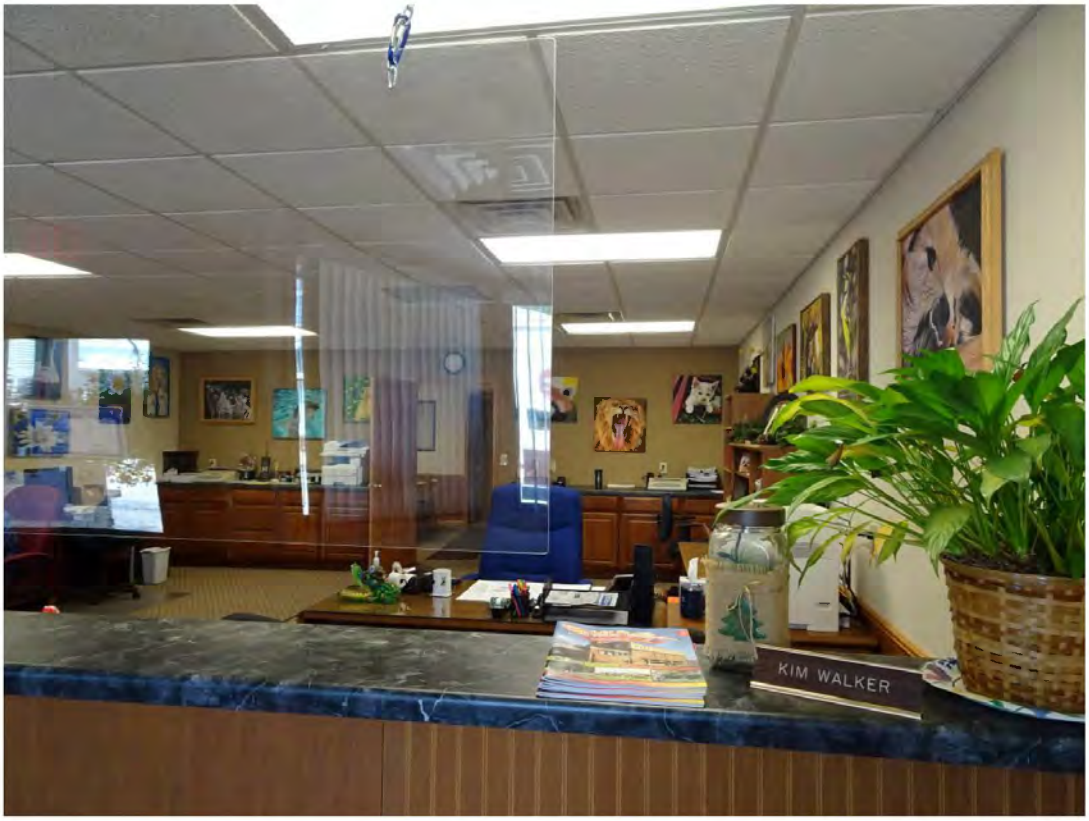
3.3. Consultant Recommended Capital Improvements: 2020 dollars

ADA Accessible Toilet Room Renovation	$10,000 - $15,000
LED Lighting Upgrades (Interior & Exterior)	$15,000 - $20,000

La Farge Village Hall Context

Exterior North-East View – Village Hall Overview

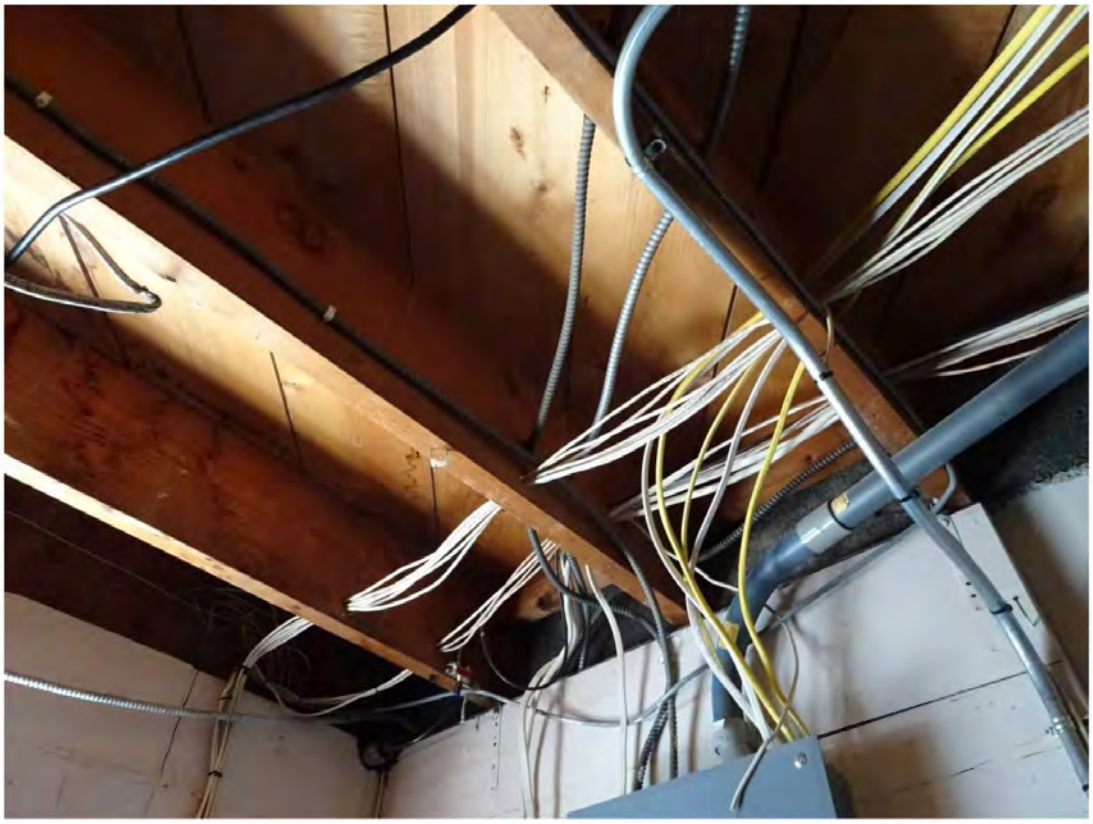
Exterior View – Front Entry Masonry and Window Maintenance



Interior View – Public Service Counter

Interior View – Staff Meeting Room

Interior View – Back of House Area



Excessive Joist Penetrations – Back of House First Floor

Interior View – Non-Accessible Toilet Room

Interior View – Service Sink Work Area

Interior View – Non-Rated Stair with Combustible Storage Beneath

Interior View – Basement Area

Interior View – Basement Perimeter Seepage Drainage Trench

Interior View – Basement Plumbing, Spray Foam Insulation, Potential Dry Rot

Interior View – Basement Base of Chimney Water Damage

Exterior View – Back Painted Masonry Façade

Exterior View – Back Exit Door Step / Threshold Needing Repairs

APPENDIX C: Infrastructure Assessment

- Table 4.7-A: 2019 Pavement Surface Evaluation & Ratings
- Figure 4.7-A: Sanitary Sewer Map
- Table 4.7-C WWTF Influent Flows and BOD Loadings
- Figure 4.7-E: Water Main Map
- Figure 4.7-G: Communications Map
- Infrastructure Improvements Map (Priority 1)
- Infrastructure Opinions of Probable Cost
- Electric Substation Preliminary Engineering Report
- Community Solar Initiative: Project Description & Goals

Table 4.7-A Village of La Farge Year 2019 Pavement Surface Evaluation and Ratings

Road	Location (From)	Location (To)	Length (ft)	Width (feet)	Road Material	PASER Surface Rating		PASER General Condition	Inspection Year	Recommended Repair/Maintenance Measure
Adams St	Mill St / N Mill St / STH 131	Park Dr (3)	581.00	20	Hot Mix Asphalt Pavement	6	Good	Shows signs of aging. Sound structural condition	2019	Crack Filling & Sealcoating
Adams St	Park Dr (3)	Park Dr (1)	211.00	20	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Adams St	Park Dr (1)	Bird St / Lakeview Dr	264.00	20	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Adams St	Bird St / Lakeview Dr	State St	317.00	20	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Alley St	Cherry St	Termini	211.00	12	Hot Mix Asphalt Pavement	6	Good	Shows signs of aging. Sound structural condition	2019	Crack Filling & Sealcoating
Barclay Ct	Lakeview Dr	Termini	158.00	16	Hot Mix Asphalt Pavement	2	Very Poor	Severe deterioration. Needs reconstruction with extensive base repair	2019	Pulverize & Overlay
Bird St	Adams St / Lakeview Dr	Field St	317.00	22	Hot Mix Asphalt Pavement	6	Good	Shows signs of aging. Sound structural condition	2019	Crack Filling & Sealcoating
Bird St	Field St	North St	211.00	22	Hot Mix Asphalt Pavement	6	Good	Shows signs of aging. Sound structural condition	2019	Crack Filling & Sealcoating
Bird St	North St	School St	317.00	22	Hot Mix Asphalt Pavement	6	Good	Shows signs of aging. Sound structural condition	2019	Crack Filling & Sealcoating
Bird St	School St	Highland St	370.00	22	Hot Mix Asphalt Pavement	6	Good	Shows signs of aging. Sound structural condition	2019	Crack Filling & Sealcoating
Bird St	Highland St	Penn St	317.00	22	Hot Mix Asphalt Pavement	6	Good	Shows signs of aging. Sound structural condition	2019	Crack Filling & Sealcoating
Bird St	Penn St	Main St / STH 82 / STH 131	158.00	42	Hot Mix Asphalt Pavement	6	Good	Shows signs of aging. Sound structural condition	2019	Crack Filling & Sealcoating
Bird St	Penn St	Main St / STH 82 / STH 131	159.00	49	Cold Mix Asphalt Pavement	6	Good	Shows signs of aging. Sound structural condition	2019	Crack Filling & Sealcoating
Bird St	Main St / STH 82 / STH 131	Snow St	317.00	60	Hot Mix Asphalt Pavement	5	Fair	Surface aging. Sound structural condition	2019	Crack Fill & Seal Coat, or Pulverize & Overlay
Bird St	Snow St	Termini	158.00	12	Hot Mix Asphalt Pavement	5	Fair	Surface aging. Sound structural condition	2019	Crack Fill & Seal Coat, or Pulverize & Overlay
Cherry St	Termini	Snow St	370.00	22	Hot Mix Asphalt Pavement	5	Fair	Surface aging. Sound structural condition	2019	Crack Fill & Seal Coat, or Pulverize & Overlay
Cherry St	Snow St	Main St / STH 82	264.00	22	Hot Mix Asphalt Pavement	5	Fair	Surface aging. Sound structural condition	2019	Crack Fill & Seal Coat, or Pulverize & Overlay
Cherry St	Main St / STH 82	Alley St	174.00	20	Cold Mix Asphalt Pavement	5	Fair	Surface aging. Sound structural condition	2019	Crack Fill & Seal Coat, or Pulverize & Overlay
Cherry St	Alley St	Penn St	143.00	20	Cold Mix Asphalt Pavement	5	Fair	Surface aging. Sound structural condition	2019	Crack Fill & Seal Coat, or Pulverize & Overlay
Cherry St	Penn St	Highland St	317.00	16	Cold Mix Asphalt Pavement	5	Fair	Surface aging. Sound structural condition	2019	Crack Fill & Seal Coat, or Pulverize & Overlay
Cherry St	Highland St	School St	317.00	16	Cold Mix Asphalt Pavement	5	Fair	Surface aging. Sound structural condition	2019	Crack Fill & Seal Coat, or Pulverize & Overlay
Elm St	School St	Highland St	317.00	14	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Elm St	Highland St	Penn St	370	20	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Elm St	Penn St	Main St / STH 82	317	20	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Field St	Silver St	Bird St	370.00	20	Hot Mix Asphalt Pavement	5	Fair	Surface aging. Sound structural condition	2019	Crack Fill & Seal Coat, or Pulverize & Overlay
Gold St	Termini	Snow St	370.00	20	Hot Mix Asphalt Pavement	5	Fair	Surface aging. Sound structural condition	2019	Crack Fill & Seal Coat, or Pulverize & Overlay

Table 4.7-A Village of La Farge Year 2019 Pavement Surface Evaluation and Ratings

Gold St	Snow St	Main St / STH 82 / STH 131	370.00	24	Hot Mix Asphalt Pavement	5	Fair	Surface aging. Sound structural condition	2019	Crack Fill & Seal Coat, or Pulverize & Overlay
Gold St	Highland St	School St	370.00	20	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Gold St	School St	North St	317.00	20	Hot Mix Asphalt Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Highland St	Mill St / N Mill St / STH 131	Gold St	317.00	22	Hot Mix Asphalt Pavement	9	Excellent	Recent overlay. Like new	2019	No maintenance
Highland St	Gold St	Silver St	317.00	20	Hot Mix Asphalt Pavement	9	Excellent	Recent overlay. Like new	2019	No maintenance
Highland St	Silver St	Bird St	317.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Highland St	Bird St	State St	370.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Highland St	State St	Maple St	317.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Highland St	Maple St	Elm St	158.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Highland St	Elm St	Elm St	158.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Highland St	Elm St	Oak St	370.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Highland St	Oak St	Cherry St	317.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Highland St	Cherry St	Pine St	634.00	18	Hot Mix Asphalt Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Hillview Dr	Lakeview Dr	Oak Dr	211.00	18	Hot Mix Asphalt Pavement	7	Good	First signs of aging	2019	Routine crack filling
Lakeview Dr	Adams St / Bird St	Shird Ct	822.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Lakeview Dr	Shird Ct	Hillview Dr	762.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Lakeview Dr	Hillview Dr	Barclay Ct	722.00	22	Hot Mix Asphalt Pavement	5	Fair	Surface aging. Sound structural condition	2019	Crack Fill & Seal Coat, or Pulverize & Overlay
Lakeview Dr	Barclay Ct	Maple Ct E / Maple St	70.00	22	Hot Mix Asphalt Pavement	5	Fair	Surface aging. Sound structural condition	2019	Crack Fill & Seal Coat, or Pulverize & Overlay
W Lawton Dr	N Seelyburg Rd	Termini	845.00	18	Sealcoat Pavement	3	Poor	Needs patching and repair prior to major overlay	2019	Pulverize & Overlay
Maple Ct E	Lakeview Dr / Maple St	Maple Ct W	158.00	16	Hot Mix Asphalt Pavement	3	Poor	Needs patching and repair prior to major overlay	2019	Pulverize & Overlay
Maple Ct W	Termini	Maple Ct E	211.00	16	Hot Mix Asphalt Pavement	3	Poor	Needs patching and repair prior to major overlay	2019	Pulverize & Overlay
Maple Ct W	Maple Ct E	Termini	158.00	16	Hot Mix Asphalt Pavement	3	Poor	Needs patching and repair prior to major overlay	2019	Pulverize & Overlay
Maple St	Snow St	Main St / STH 82	317.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Maple St	Main St / STH 82	Penn St	106.00	28	Cold Mix Asphalt Pavement	3	Poor	Needs patching and repair prior to major overlay	2019	Pulverize & Overlay
Maple St	Main St / STH 82	Penn St	211.00	24	Hot Mix Asphalt Pavement	3	Poor	Needs patching and repair prior to major overlay	2019	Pulverize & Overlay
Maple St	Penn St	Highland St	370.00	24	Hot Mix Asphalt Pavement	5	Fair	Surface aging. Sound structural condition	2019	Crack Fill & Seal Coat, or Pulverize & Overlay
Maple St	Highland St	School St	317.00	24	Hot Mix Asphalt Pavement	5	Fair	Surface aging. Sound structural condition	2019	Crack Fill & Seal Coat, or Pulverize & Overlay
Maple St	School St	North St	370.00	24	Hot Mix Asphalt Pavement	5	Fair	Surface aging. Sound structural condition	2019	Crack Fill & Seal Coat, or Pulverize & Overlay
Maple St	North St	Lakeview Dr / Maple Ct E	581.00	22	Hot Mix Asphalt Pavement	5	Fair	Surface aging. Sound structural condition	2019	Crack Fill & Seal Coat, or Pulverize & Overlay
Mill St	Pearl St S	Snow St	211.00	22	Cold Mix Asphalt Pavement	5	Fair	Surface aging. Sound structural condition	2019	Crack Fill & Seal Coat, or Pulverize & Overlay

Table 4.7-A Village of La Farge Year 2019 Pavement Surface Evaluation and Ratings

Mill St	Pearl St S	Snow St	792.00	20	Hot Mix Asphalt Pavement	5	Fair	Surface aging. Sound structural condition	2019	Crack Fill & Seal Coat, or Pulverize & Overlay
Mill St	Snow St	Main St / STH 82 / STH 131	317.00	20	Hot Mix Asphalt Pavement	8	Very Good	Recent sealcoat or new cold mix	2019	No maintenance required
Monroe St	Washington St	Silver St	422.00	10	Gravel Road	1	Failed	Reconstruction required	2019	Rebuild Gravel Road
North St	Mill St / N Mill St / STH 131	Gold St	317.00	24	Hot Mix Asphalt Pavement	3	Poor	Needs patching and repair prior to major overlay	2019	Pulverize & Overlay
North St	Gold St	Silver St	317.00	24	Hot Mix Asphalt Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
North St	Silver St	Bird St	317.00	20	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
North St	Bird St	State St	317.00	18	Hot Mix Asphalt Pavement	9	Excellent	Recent overlay. Like new	2019	No maintenance required
North St	State St	Maple St	370.00	18	Hot Mix Asphalt Pavement	9	Excellent	Recent overlay. Like new	2019	No maintenance required
Oak Dr	Hillview Dr	Hillview Dr	762.00	24	Hot Mix Asphalt Pavement	7	Good	First signs of aging	2019	Routine crack filling
Oak St	Highland St	Penn St	370.00	20	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Oak St	Penn St	Main St / STH 82	370.00	20	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
One Organic Way	N Mill St / STH 131	Termini	2114.00	24	Hot Mix Asphalt Pavement	7	Good	First signs of aging	2019	Routine crack filling
Park Dr (1)	Park Dr (2)	Adams St	158.00	16	Cold Mix Asphalt Pavement	3	Poor	Needs patching and repair prior to major overlay	2019	Pulverize & Overlay
Park Dr (1)	Park Dr (2)	Park Dr (2) / Park Dr (3) / Termini	1267.00	16	Cold Mix Asphalt Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Park Dr (2)	Park Dr (1)	Park Dr (1) / Park Dr (3) / Termini	370.00	16	Cold Mix Asphalt Pavement	3	Poor	Needs patching and repair prior to major overlay	2019	Pulverize & Overlay
Park Dr (3)	Adams St	Park Dr (1) / Park Dr (2) / Termini	317.00	10	Cold Mix Asphalt Pavement	3	Poor	Needs patching and repair prior to major overlay	2019	Pulverize & Overlay
Pearl St S	Mill St	Washington St	317.00	20	Hot Mix Asphalt Pavement	5	Fair	Surface aging. Sound structural condition	2019	Crack Fill & Seal Coat, or Pulverize & Overlay
Pearl St S	Washington St	Silver St	317.00	20	Hot Mix Asphalt Pavement	5	Fair	Surface aging. Sound structural condition	2019	Crack Fill & Seal Coat, or Pulverize & Overlay
Pearl St S	Silver St	State St / STH 131	686.00	18	Hot Mix Asphalt Pavement	5	Fair	Surface aging. Sound structural condition	2019	Crack Fill & Seal Coat, or Pulverize & Overlay
Pearl St S	State St / STH 131	Termini	106.00	10	Gravel Road	5	Fair	Surface aging. Sound structural condition	2019	Crack Fill & Seal Coat, or Pulverize & Overlay
Penn St	Silver St	Bird St	317.00	24	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Penn St	Bird St	State St	370.00	24	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Penn St	State St	Maple St	317.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Penn St	Maple St	Elm St	317.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Penn St	Elm St	Oak St	370.00	18	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Penn St	Oak St	Cherry St	317.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Penn St	Cherry St	Termini	686.00	14	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Penn St	Cherry St	Termini	264.00	10	Hot Mix Asphalt Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Pine St	Highland St	School St	264.00	18	Hot Mix Asphalt Pavement	6	Good	Shows signs of aging. Sound structural condition	2019	Crack Filling & Sealcoating
School St	Gold St	Silver St	317.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
School St	Silver St	Bird St	317.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
School St	Bird St	State St	317.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay

Table 4.7-A Village of La Farge Year 2019 Pavement Surface Evaluation and Ratings

School St	State St	Maple St	317.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
School St	Maple St	Elm St	211.00	18	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
School St	Cherry St	Pine St	317.00	16	Hot Mix Asphalt Pavement	6	Good	Shows signs of aging. Sound structural condition	2019	Crack Filling & Sealcoating
School St	Cherry St	Pine St	316.00	18	Hot Mix Asphalt Pavement	6	Good	Shows signs of aging. Sound structural condition	2019	Crack Filling & Sealcoating
N Seelyburg Rd	Mill St / N Mill St / STH 131	W Lawton Dr	1637	22	Sealcoat Pavement	3	Poor	Needs patching and repair prior to major overlay	2019	Pulverize & Overlay
N Seelyburg Rd	W Lawton Dr	Corps Rd / Plum Run Rd	1320.00	24	Hot Mix Asphalt Pavement	7	Good	First signs of aging	2019	Routine crack filling
Shird Ct	Lakeview Dr	Termini	211.00	22	Hot Mix Asphalt Pavement	5	Fair	Surface aging. Sound structural condition	2019	Crack Fill & Seal Coat, or Pulverize & Overlay
Silver St	Monroe St	Pearl St S	634.00	10	Gravel Road	1	Failed	Reconstruction required	2019	Rebuild Gravel Road
Silver St	Pearl St S	Snow St	950.00	22	Hot Mix Asphalt Pavement	9	Excellent	Recent overlay. Like new	2019	No maintenance required
Silver St	Snow St	Main St / STH 82 / STH 131	317.00	24	Hot Mix Asphalt Pavement	6	Good	Shows signs of aging. Sound structural condition	2019	Crack Filling & Sealcoating
Silver St	Main St / STH 82 / STH 131	Penn St	211.00	40	Hot Mix Asphalt Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Silver St	Main St / STH 82 / STH 131	Penn St	159.00	22	Hot Mix Asphalt Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Silver St	Penn St	Highland St	317.00	24	Hot Mix Asphalt Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Silver St	Highland St	School St	317.00	24	Hot Mix Asphalt Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Silver St	School St	North St	317.00	24	Hot Mix Asphalt Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Silver St	North St	Field St	211.00	24	Hot Mix Asphalt Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Snow St	Mill St	Gold St	370.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Snow St	Gold St	Silver St	317.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Snow St	Silver St	Bird St	317.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Snow St	Bird St	State St / STH 131	370.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2020	Pulverize & Overlay
Snow St	State St / STH 131	Maple St	317.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2021	Pulverize & Overlay
Snow St	Cherry St	Termini	264.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2022	Pulverize & Overlay
Spring St	State St / STH 131	Termini	158.00	20	Gravel Road	1	Failed	Reconstruction required	2019	Rebuild Gravel Road
State St	Main St / STH 82 / STH 131	Penn St	317.00	38	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
State St	Penn St	Highland St	317.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
State St	Highland St	School St	317.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
State St	School St	North St	370.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
State St	North St	Adams St	422.00	22	Sealcoat Pavement	4	Fair	Significant aging and first signs of need for strengthening	2019	Pulverize & Overlay
Washington St	Pearl St S	Monroe St	475.00	14	Gravel Road	1	Failed	Reconstruction required	2019	Rebuild Gravel Road
Washington St	Monroe St	Termini	211.00	14	Gravel Road	1	Failed	Reconstruction required	2019	Rebuild Gravel Road

PASER Visible Distress per Rating
Slight raveling (loss of fines) and traffic wear. Longitudinal cracks (open 1/4"– 1/2"). Transverse cracks (open 1/4"– 1/2"), some spaced less than 10'. First sign of block cracking. Sight to moderate flushing or polishing. Occasional patching in good condition.
Severe surface reveling. Multiple longitudinal and transverse cracking with slight raveling. Longitudinal cracking in wheel path. Block cracking (over 50% of surface). Patching in fair condition. Slight rutting or distortions (1/2" deep or less).
Severe surface reveling. Multiple longitudinal and transverse cracking with slight raveling. Longitudinal cracking in wheel path. Block cracking (over 50% of surface). Patching in fair condition. Slight rutting or distortions (1/2" deep or less).
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Slight raveling (loss of fines) and traffic wear. Longitudinal cracks (open 1/4"– 1/2"). Transverse cracks (open 1/4"– 1/2"), some spaced less than 10'. First sign of block cracking. Sight to moderate flushing or polishing. Occasional patching in good condition.
Alligator cracking (over 25% of surface). Severe rutting or distortions (2" or more deep). Extensive patching in poor condition. Potholes.
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Closely spaced longitudinal and transverse cracks often showing raveling and crack erosion. Severe block racking. Some alligator cracking (less than 25% of surface). Patches in fair to poor condition. Moderate rutting or distortion (greater than 1/2" but less than 2" deep). Occasional potholes.
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No longitudinal cracks except reflection of paving joints. Occasional transverse cracks, widely spaced (40' or greater). All cracks sealed or tight (open less than1/4")
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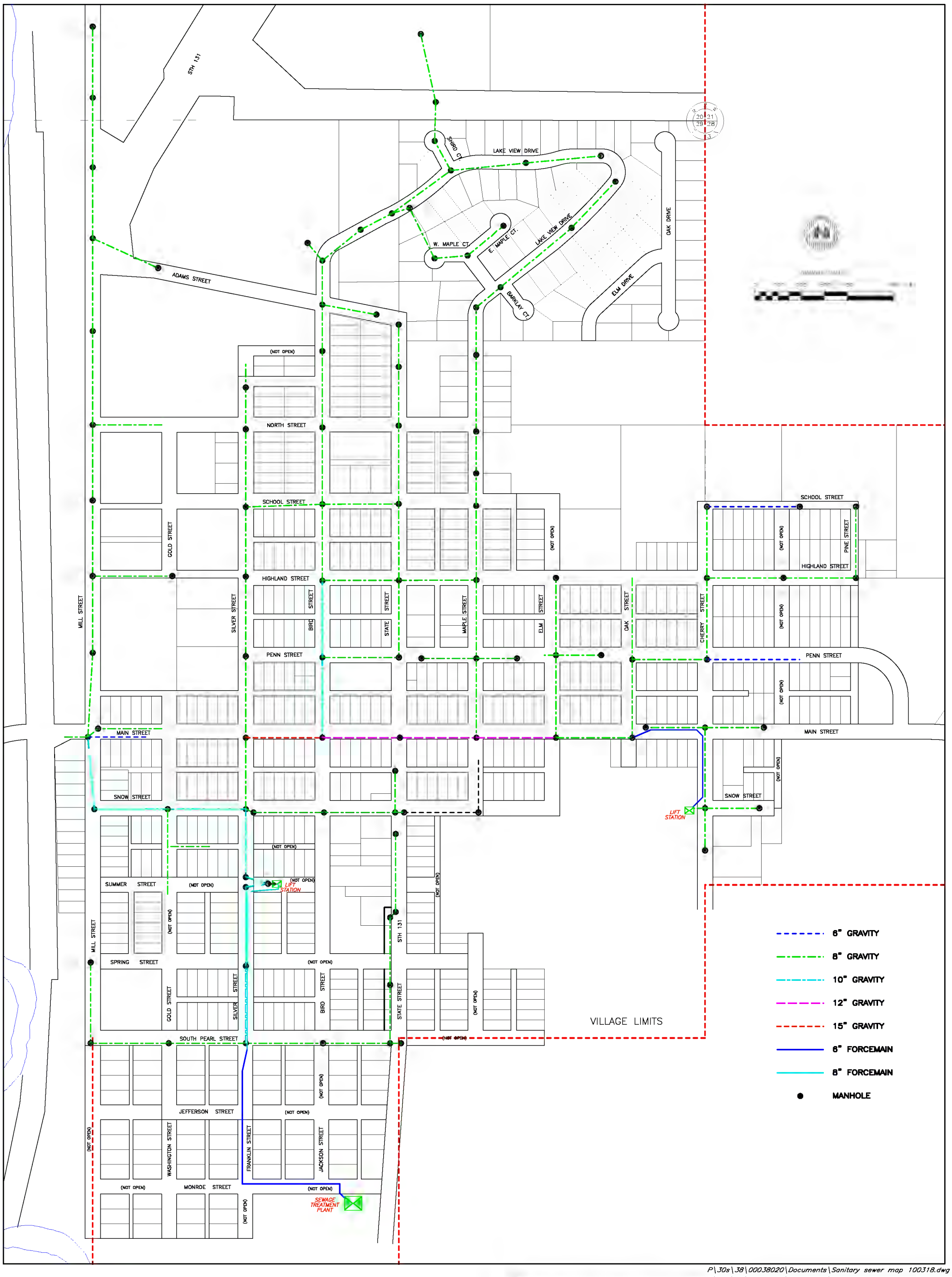
Figure 4.7-A VILLAGE OF LAC-DU-FLAMBEAU SANITARY SEWER MAP



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2/99	ORIGINAL DRAWING	BLH
10/18	SILVER ST LS LOCATION	MJM

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Table 4.7-C - WWTF Influent Flows & BOD Loadings
Village of LaFarge Wastewater Treatment Facility
Years 2017-2019

Maximum Month Design Flow = 0.172 MGD
Average Annual Design Flow = 0.172 MGD
Design BOD = 545 lbs/d
Peak Factor = 1.00

Month	Influent Flow MGD	% Monthly Max Design Flow	Ave Annual Flow MGD	Ave Annual Flow gpd	Peak Flow cfs	BOD Conc. mg/l	BOD Loading* lbs/d	Ave Annual BOD Load lbs./d
2017								
January	0.1536	89%			0.238	60	77	
February	0.1193	69%			0.185	114	113	
March	0.1594	93%			0.247	67	89	
April	0.2089	121%			0.323	59	103	
May	0.2009	117%			0.311	48	80	
June	0.1496	87%	0.1514	151,400	0.231	58	72	75
July	0.1913	111%			0.296	45	72	
August	0.1413	82%			0.219	49	58	
September	0.1031	60%			0.160	74	64	
October	0.1551	90%			0.240	37	48	
November	0.1230	72%			0.190	57	58	
December	0.1113	65%			0.172	71	66	
2018								
January	0.1155	67%			0.179	89	86	
February	0.1070	62%			0.166	75	67	
March	0.1093	64%			0.169	108	98	
April	0.1598	93%			0.247	71	95	
May	0.2836	165%			0.439	54	128	
June	0.1740	101%	0.1784	178,375	0.269	57	83	93
July	0.1354	79%			0.210	62	70	
August	0.1267	74%			0.196	81	86	
September	0.3210	187%			0.497	48	129	
October	0.2727	159%			0.422	52	118	
November	0.1816	106%			0.281	51	77	
December	0.1539	89%			0.238	65	83	
2019								
January	0.1641	95%			0.254	59	81	
February	0.1449	84%			0.224	61	74	
March	0.2264	132%			0.350	70	132	
April	0.1931	112%			0.299	47	76	
May	0.2393	139%			0.370	38	76	
June	0.1980	115%	0.1935	193,475	0.306	56	92	81
July	0.2427	141%			0.376	37	75	
August	0.1465	85%			0.227	49	60	
September	0.2092	122%			0.324	52	91	
October	0.2250	131%			0.348	42	79	
November	0.1641	95%			0.254	44	60	
December	0.1684	98%			0.261	58	81	

Table Notes: * BOD Loading = Influent Flow (cfs) * BOD Concentration (mg/l) * 8.34

Color Shading Legend:
= Design parameter exceeded.

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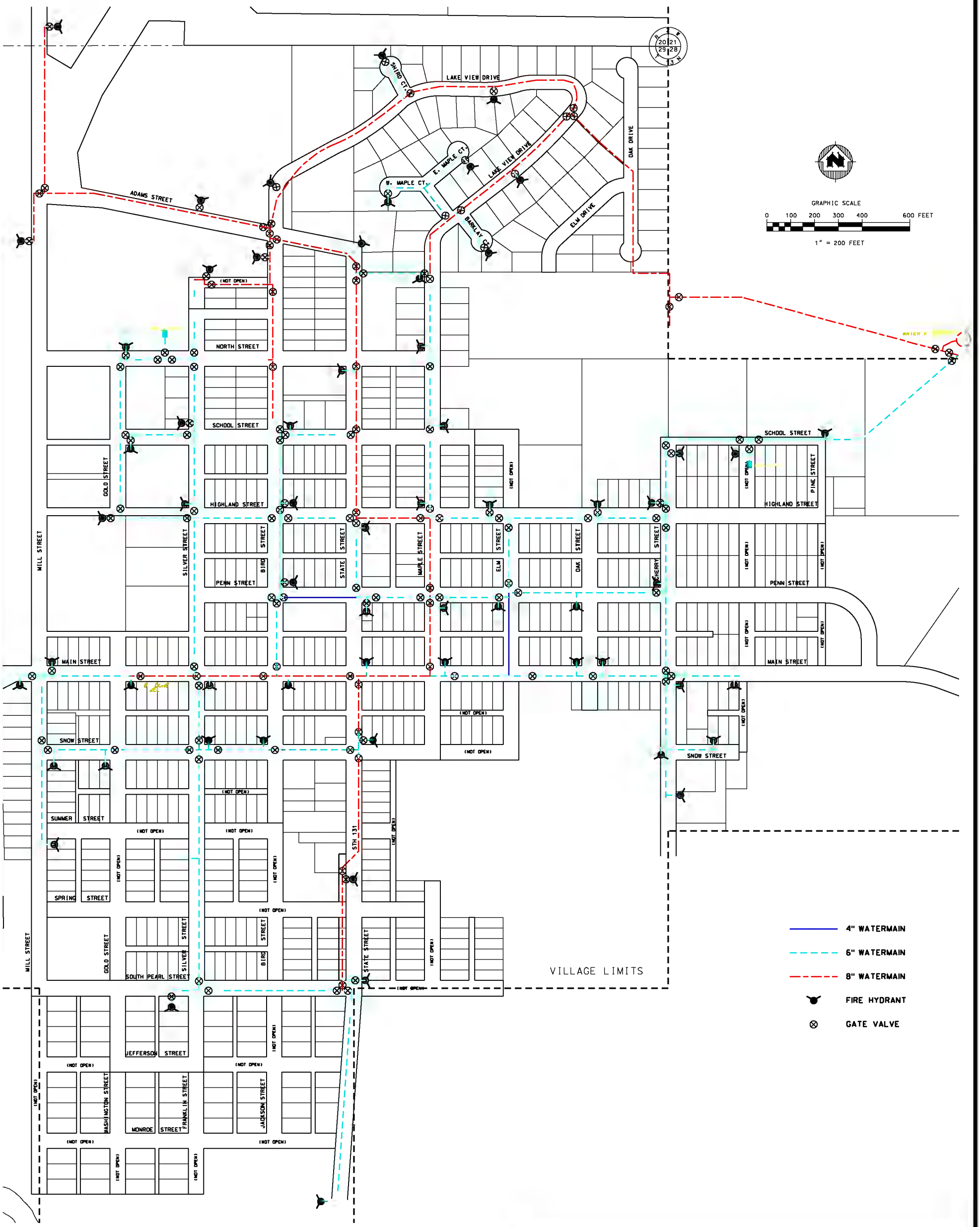
planners engineers adv sors

Figure 4.7-E

VILLAGE OF LAFARGE WATERMAIN MAP



G:/PROJECTS/CITYMAPS/WI/LAFARGE/WAT_MAP.DGN

NO.	DATE	REVISION	BY
	2/99	ORIGINAL DRAWING	BLH

MSA PROFESSIONAL SERVICES

TRANSPORTATION • MUNICIPAL • REMEDIATION
DEVELOPMENT • ENVIRONMENTAL

wat_map.dgn 6/13/2012 1:43:59 PM jhellenbrand

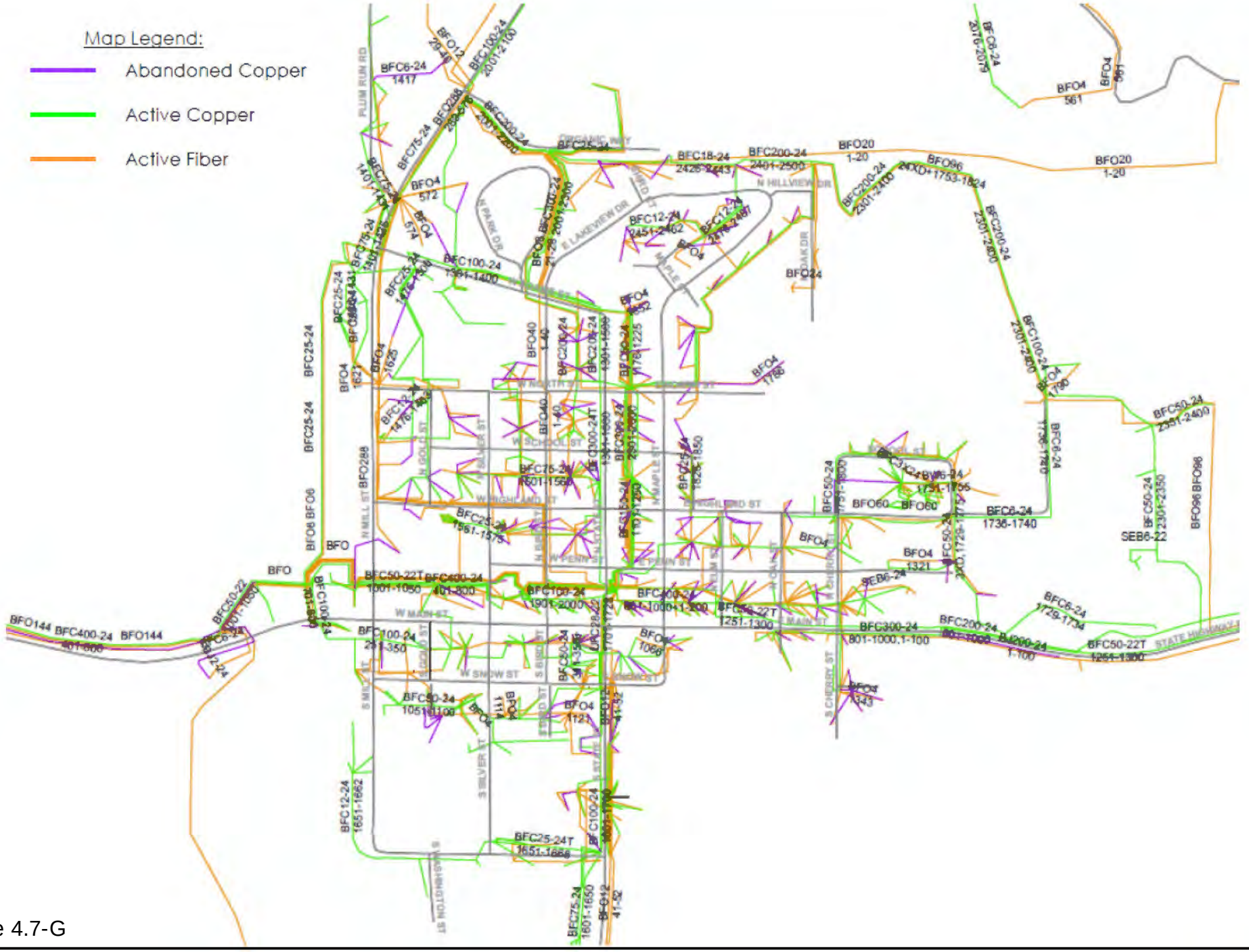


Figure 4.7-G

Village of La Farge—Communications Map
Vernon Communications Coop
Village of La Farge, Vernon County, Wisconsin

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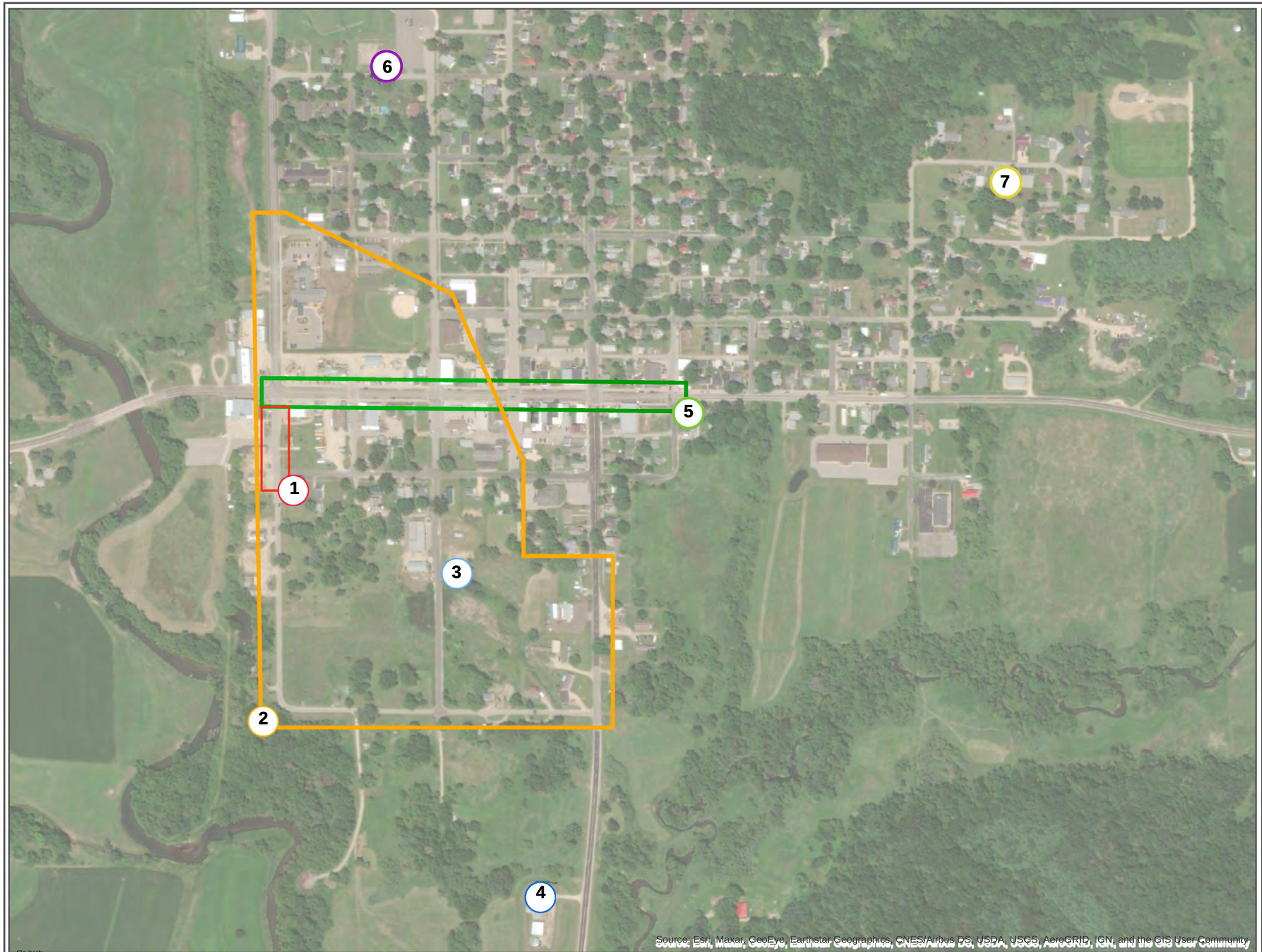

Infrastructure Improvements

Village of La Farge

1. Mill St Sanitary Sewer Replacement
2. Flood Proof Collection System within Floodplain
3. Dry Land Access to Silver St Lift Station
4. Water Heater for Chemical Room
5. Main St Reconstruct with New Sanitary Sewer, Water Main, Storm Sewer, Lighting and Streetscaping
6. Well No. 2 Addition of Water Heater
7. Well No. 3 Addition of Emergency Generator and Addition of Emergency Drench Shower

Date Created:12/9/2020
Date Amended:

Data Sources:

0 0.035 0.07 0.14 Miles

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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REEDSBURG - MADISON - PRAIRIE DU CHIEN - MILWAUKEE METRO
400 Viking Drive, Reedsburg, WI 53959
Phone: (608) 524-6468 Fax: (608) 524-8218

File Path:

Data Sources:

Village of La Farge Economic Recovery Plan
Opinion of Probable Cost - Infrastructure Improvements Recommendations

Item Reference Nuber	Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
Wastewater Collection System					
1. Main Street Improvements (Mill Street - Maple Street) - Replace Sanitary Sewer & Services					
1	Mobilization, Performance and Payment Bonds	LS	1	$5,000.00	$5,000.00
2	Pavement Removal	SY	2,223	$4.00	$8,890.00
3	Sanitary Sewer - 12" PVC, SDR 35	LF	1,000	$100.00	$100,000.00
4	Sanitary Sewer - 10" PVC, SDR 35	LF	80	$80.00	$6,400.00
5	Sanitary Sewer - 8" PVC, SDR 35	LF	500	$60.00	$30,000.00
6	Sanitary Sewer Manhole - 48" Dia. w/ Casting	EA	6	$5,000.00	$30,000.00
7	Sanitary Sewer Service Lateral - 4" PVC, SCH 40	EA	35	$48.00	$1,680.00
8	Select Granular Backfill - Trucked-In	CY	5,852	$15.00	$87,780.00
9	Excavation Below Subgrade & Backfill	CY	50	$18.00	$900.00
10	Base Aggregate Dense - 1-1/4" - 4" Thick	SY	2,223	$5.00	$11,112.50
11	Base Aggregate Dense - 3" - 8" Thick	SY	2,223	$8.00	$17,780.00
12	HMA Pavement 4 LT 58-28 S (Upper Layer)-1.75" Thick	TON	225	$72.00	$16,200.00
13	HMA Pavement 3 LT 58-28 S (Lower Layer)-2.25" Thick	TON	290	$70.00	$20,300.00
14	Concrete Curb & Gutter - 18" w/ Base Aggregate Dense	LF	525	$18.00	$9,450.00
15	Concrete Sidewalk - 5" Thickness w/ Base Aggregate Dense	SF	3,150	$4.50	$14,175.00
				Subtotal:	**$359,667.50**
				Contingencies (15% +/-):	**$54,232.50**
				Professional Services (15%):	**$62,100.00**
				Total:	**$476,000.00**
2. Mill Street Improvements (Main Street to Snow Street) - Replace Sanitary Sewer & Services					
1	Mobilization, Performance and Payment Bonds	LS	1	$5,000.00	$5,000.00
2	Pavement Removal	SY	1,000	$4.00	$4,000.00
3	Sanitary Sewer - 10" PVC, SDR 35	LF	320	$80.00	$25,600.00
4	Sanitary Sewer Manhole - 48" Dia. w/ Casting	EA	1	$5,000.00	$5,000.00
5	Sanitary Sewer Service Lateral - 4" PVC, SCH 40	EA	4	$48.00	$192.00
6	Select Granular Backfill - Trucked-In	CY	1,250	$15.00	$18,750.00
7	Excavation Below Subgrade & Backfill	CY	70	$18.00	$1,260.00
8	Base Aggregate Dense - 1-1/4" - 4" Thick	SY	1,000	$5.00	$5,000.00
9	Base Aggregate Dense - 3" - 8" Thick	SY	1,000	$8.00	$8,000.00
10	HMA Pavement 4 LT 58-28 S (Upper Layer)-1.75" Thick	TON	110	$72.00	$7,920.00
11	HMA Pavement 3 LT 58-28 S (Lower Layer)-2.25" Thick	TON	130	$70.00	$9,100.00
12	Concrete Curb & Gutter - 18" w/ Base Aggregate	LF	60	$18.00	$1,080.00
13	Concrete Sidewalk - 5" Thickness w/ Base Aggregate	SF	360	$4.50	$1,620.00
				Subtotal:	**$92,522.00**
				Contingencies (15% +/-):	**$14,478.00**
				Professional Services (15%):	**$16,000.00**
				Total:	**$123,000.00**

Item Reference Nuber	Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
3. Manhole Gaskets W/ Bolt Down Lids					
1	Manhole Gaskets with Bolt Down Lid	EA	17	$800.00	$13,600.00
2	Base Aggregate Dense - 1-1/4" - 4" Thick	SY	190	$5.00	$950.00
3	Base Aggregate Dense - 3" - 8" Thick	SY	190	$8.00	$1,520.00
4	HMA Pavement 4 LT 58-28 S (Upper Layer)-1.75" Thick	TON	10	$100.00	$1,000.00
5	HMA Pavement 3 LT 58-28 S (Lower Layer)-2.25" Thick	TON	10	$95.00	$950.00
				Subtotal:	**$18,020.00**
				Contingencies (15% +/-):	**$3,780.00**
				Professional Services (15%):	**$3,200.00**
				Total:	**$25,000.00**
4. Television of Collection System					
1	Televising Sanitary Sewer	LF	38,500	$3.50	$134,750.00
				Total:	**$134,750.00**
5. Silver Street Lift Station (Access Road)					
1	Performance & Payment Bonds	LS	1	$1,000.00	$1,000.00
2	Mobilization	LS	1	$5,000.00	$5,000.00
3	Base Aggregate Dense - 1-1/4" - 4" Thick	SY	720	$5.00	$3,600.00
4	Base Aggregate Dense - 3" - 8" Thick	SY	720	$8.00	$5,760.00
5	Select Roadway Fill - Trucked In	CY	490	$15.00	$7,350.00
				Subtotal:	$22,710.00
				Contingencies (15% +/-):	$4,290.00
				Professional Services (15%):	$4,000.00
				Total:	**$31,000.00**
6. Wastewater Treatment Facility Improvements					
1	Chemical Room Eyewash/Drench Shower Water Heater	LS	1	$8,000.00	$8,000.00
				Subtotal:	$8,000.00
				Contingencies (15% +/-):	$1,600.00
				Professional Services (15%):	$1,400.00
				Total:	**$11,000.00**

Item Reference Nuber	Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
3. Manhole Gaskets W/ Bolt Down Lids					
1	Manhole Gaskets with Bolt Down Lid	EA	17	$800.00	$13,600.00
2	Base Aggregate Dense - 1-1/4" - 4" Thick	SY	190	$5.00	$950.00
3	Base Aggregate Dense - 3" - 8" Thick	SY	190	$8.00	$1,520.00
4	HMA Pavement 4 LT 58-28 S (Upper Layer)-1.75" Thick	TON	10	$100.00	$1,000.00
5	HMA Pavement 3 LT 58-28 S (Lower Layer)-2.25" Thick	TON	10	$95.00	$950.00
				Subtotal:	**$18,020.00**
				Contingencies (15% +/-):	**$3,780.00**
				Professional Services (15%):	**$3,200.00**
				Total:	**$25,000.00**
4. Television of Collection System					
1	Televising Sanitary Sewer	LF	38,500	$3.50	$134,750.00
				Total:	**$134,750.00**
5. Silver Street Lift Station (Access Road)					
1	Performance & Payment Bonds	LS	1	$1,000.00	$1,000.00
2	Mobilization	LS	1	$5,000.00	$5,000.00
3	Base Aggregate Dense - 1-1/4" - 4" Thick	SY	720	$5.00	$3,600.00
4	Base Aggregate Dense - 3" - 8" Thick	SY	720	$8.00	$5,760.00
5	Select Roadway Fill - Trucked In	CY	490	$15.00	$7,350.00
				Subtotal:	$22,710.00
				Contingencies (15% +/-):	$4,290.00
				Professional Services (15%):	$4,000.00
				Total:	**$31,000.00**
6. Wastewater Treatment Facility Improvements					
1	Chemical Room Eyewash/Drench Shower Water Heater	LS	1	$8,000.00	$8,000.00
				Subtotal:	$8,000.00
				Contingencies (15% +/-):	$1,600.00
				Professional Services (15%):	$1,400.00
				Total:	**$11,000.00**

Village of La Farge Economic Recovery Plan
Opinion of Probable Cost - Infrastructure Improvements Recommendations

Item Reference Number	Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
Water Supply, Storage, & Distribution					
1. Main Street Improvements (Mill Street - Maple Street) - Replace Water Main & Services					
1	Mobilization, Performance and Payment Bonds	LS	1	$5,000.00	$5,000.00
2	Pavement Removal	SY	2,223	$4.00	$8,890.00
3	Water Main - 8" D.I. CL 52	LF	2,000	$72.00	$144,000.00
4	Water Main - 6" D.I. CL 52	LF	100	$70.00	$7,000.00
5	Gate Valve & Box - 8"	EA	6	$1,600.00	$9,600.00
6	Gate Valve & Box - 6"	EA	5	$1,400.00	$7,000.00
7	Replace Hydrants	EA	5	$4,500.00	$22,500.00
8	Replace Service Connections	EA	35	$1,000.00	$35,000.00
9	Select Granular Backfill - Trucked-In	CY	1,870	$15.00	$28,050.00
10	Base Aggregate Dense - 1-1/4" - 4" Thick	SY	2,223	$5.00	$11,112.50
11	Base Aggregate Dense - 3" - 8" Thick	SY	2,223	$8.00	$17,780.00
12	HMA Pavement 4 LT 58-28 S (Upper Layer)	TON	225	$72.00	$16,200.00
13	HMA Pavement 3 LT 58-28 S (Lower Layer)	TON	290	$70.00	$20,300.00
14	Concrete Sidewalk - 5" w/ Base Aggregate Dense	SF	3,600	$4.50	$16,200.00
15	Concrete Curb & Gutter - 30" w/ Base Aggregate Dense	LF	600	$18.00	$10,800.00
				Subtotal:	$359,432.50
				Contingencies (15% +/-):	$54,467.50
				Professional Services (15%):	$62,100.00
				Total:	**$476,000.00**
2. Mill Street Improvements (Loop Watermain)					
1	Mobilization, Performance and Payment Bonds	LS	1	$5,000.00	$5,000.00
2	Pavement Removal	SY	2,000	$4.00	$8,000.00
3	Water Main - 8" D.I. CL 52	LF	900	$72.00	$64,800.00
4	Gate Valve & Box - 8"	EA	2	$1,600.00	$3,200.00
5	Gate Valve & Box - 6"	EA	1	$1,400.00	$1,400.00
6	Hydrant	EA	1	$4,500.00	$4,500.00
7	Select Granular Backfill - Trucked-In	CY	800	$15.00	$12,000.00
8	Base Aggregate Dense - 1-1/4" - 4" Thick	SY	2000	$5.00	$10,000.00
9	Base Aggregate Dense - 3" - 8" Thick	SY	2000	$8.00	$16,000.00
10	HMA Pavement 4 LT 58-28 S (Upper Layer)	TON	210	$72.00	$15,120.00
11	HMA Pavement 3 LT 58-28 S (Lower Layer)	TON	260	$70.00	$18,200.00
				Subtotal:	$158,220.00
				Contingencies (15% +/-):	$24,480.00
				Professional Services (15%):	$27,300.00
				Total:	**$210,000.00**

Item Reference Number	Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
3. Highland Street Improvements (Oak Street to Cherry Street)					
1	Mobilization, Performance and Payment Bonds	LS	1	$5,000.00	$5,000.00
2	Pavement Removal	SY	1,480	$4.00	$5,920.00
3	Water Main - 8" D.I. CL 52	LF	665	$72.00	$47,880.00
4	Water Main - 6" D.I. CL 52	LF	15	$70.00	$1,050.00
5	Gate Valve & Box - 8"	EA	2	$1,600.00	$3,200.00
6	Gate Valve & Box - 6"	EA	1	$1,400.00	$1,400.00
7	Hydrant	EA	1	$4,500.00	$4,500.00
8	Select Granular Backfill - Trucked-In	CY	610	$15.00	$9,150.00
9	Base Aggregate Dense - 1-1/4" - 4" Thick	SY	1520	$5.00	$7,600.00
10	Base Aggregate Dense - 3" - 8" Thick	SY	1520	$8.00	$12,160.00
11	HMA Pavement 4 LT 58-28 S (Upper Layer)	TON	160	$72.00	$11,520.00
12	HMA Pavement 3 LT 58-28 S (Lower Layer)	TON	200	$70.00	$14,000.00
				Subtotal:	$123,380.00
				Contingencies (15% +/-):	$19,200.00
				Professional Services (15%):	$2,800.00
				Total:	**$145,380.00**
4. Well No. 2 Improvements					
13	Eyewash/Drench Shower Water Heater	LS	1	$8,000.00	$8,000.00
				Subtotal:	$8,000.00
				Contingencies (15% +/-):	$1,600.00
				Professional Services (15%):	$1,400.00
				Total:	**$11,000.00**
5. Well No. 3 Improvements					
14	Eyewash/Drench Shower		1	$1,500.00	$1,500.00
15	Eyewash/Drench Shower Water Heater		1	$8,000.00	$8,000.00
16	Electrical Generator & Automatic Transfer Switch		1	$40,000.00	$40,000.00
				Subtotal:	$40,000.00
				Contingencies (15% +/-):	$6,100.00
				Professional Services (15%):	$6,900.00
				Total:	**$53,000.00**

Village of La Farge Economic Recovery Plan
Opinion of Probable Cost - Infrastructure Improvements Recommendations

Item Reference Nuber	Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
Streets, Sidewalks, and Pedestrian Paths					
1. Main Street Improvements (Mill Street - Maple Street)					
1	Mobilization, Performance and Payment Bonds	LS	1	$5,000.00	$5,000.00
2	Pavement Removal	SY	4,445	$2.00	$8,890.00
3	Excavation Below Subgrade & Backfill	CY	750	$18.00	$13,500.00
4	Base Aggregate Dense - 1-1/4" - 4" Thick	SY	4,445	$5.00	$22,225.00
5	Base Aggregate Dense - 3" - 8" Thick	SY	4,445	$8.00	$35,560.00
6	HMA Pavement 4 LT 58-28 S (Upper Layer)-1.75" Thick	TON	450	$72.00	$32,400.00
7	HMA Pavement 3 LT 58-28 S (Lower Layer)-2.25" Thick	TON	580	$70.00	$40,600.00
8	Concrete Curb & Gutter - 18" w/ Base Aggregate Dense	LF	1,875	$18.00	$33,750.00
9	Concrete Sidewalk - 5" Thickness w/ Base Aggregate Dense	SF	3,835	$4.50	$17,257.50
				Subtotal:	$209,182.50
				Contingencies (15% +/-):	$31,717.50
				Professional Services (15%):	$36,100.00
				Total:	**$277,000.00**
2. Continuned Road Maintenance and Repair					
1	Mobilization, Performance and Payment Bonds	LS	1	$5,000.00	$5,000.00
2	Mill & Remove Asphalt Pavement	SY	23,470	$2.00	$46,940.00
3	Chip Sealing	Miles	3	$22,000.00	$66,000.00
4	Pavement Removal	SY	11,740	$4.00	$46,960.00
5	Base Aggregate Dense - 1-1/4" - 6" Thick	SY	11,740	$6.00	$70,440.00
6	HMA Pavement 4 LT 58-28 S (Upper Layer) - 3" Thick	TON	2,030	$72.00	$146,160.00
				Subtotal:	$381,500.00
				Contingencies (15% +/-):	$57,600.00
				Professional Services (15%):	$65,900.00
				Total:	**$505,000.00**
Concrete Sidewalk Extensions, Maintenance, and Replacements					
1	Mobilization, Performance and Payment Bonds	LS	1	$5,000.00	$5,000.00
1	Concrete Sidewalk Extensions- 5" Thickness w/ Base Aggregate Dense - N. Silver Street (Main Street to Penn Street)	SF	1,600	$4.50	$7,200.00
2	Concrete Sidewalk Extensions - 5" Thickness w/ Base Aggregate Dense - E. Penn Street (Elm Street to Oak Street)	SF	1,400	$4.50	$6,300.00
3	Concrete Sidewalk Extensions - 5" Thickness w/ Base Aggregate Dense (Misc. Streets)	SF	3,000	$4.50	$13,500.00
4	Concrete Sidewalk Maintenance	LS	1	$5,000.00	$5,000.00
5	Concrete Sidewalk Replacements- 5" Thickness w/ Base Aggregate Dense (Misc. Streets)	SF	1,500	$8.00	$12,000.00
				Subtotal:	$49,000.00
				Contingencies (15% +/-):	$7,500.00
				Professional Services (15%):	$8,500.00
				Total:	**$65,000.00**
4. Storm Sewer					
1	Model Existing Storm Sewer System	LS	1	$25,000.00	$25,000.00
2	Maintenance and Cleaning	LS	1	$50,000.00	$50,000.00
				Subtotal:	$75,000.00
				Contingencies (15% +/-):	$12,000.00
				Total:	**$87,000.00**

PRELIMINARY ENGINEERING REPORT

(ED-900 – General Application for EDA Programs)

for

LA FARGE MUNICIPAL UTILITIES

Forster Electrical Engineering

550 N. Burr Oak Ave
Oregon, WI 53575
(608) 835-9009
(608) 835-9039 fax

"Excellence in electrical distribution design since 1981"

C. Preliminary Engineering Report
To be considered for assistance, all construction and design applications must include a Preliminary Engineering Report (PER) that at a minimum provides the following information:

C.1. Description of project components. Provide a general description of all project components involved in the project. Indicate whether the project involves the construction of new infrastructure or facilities or the renovation or replacement of existing ones. Describe each of the project components in terms of dimensions, quantities, capacities, square footage, etc.

The two main project components include an electrical substation and a building, which will be re-located to a new site.

The existing substation has a fence around the perimeter measuring roughly 80' by 40'. Within this substation are 4 single phase transformers (12.47kV to 4.16kV, 833KVA, 9900 lbs each), 3 voltage regulators (100KVA, 2064 lbs each), 1 fuel tank (1000 gallons), and a wood pole structure that is used for mounting switches and protection devices for the substation.

The existing building is 80' by 35' and houses a generator (1500kW CAT diesel - 1,875kVA at 0.8PF, roughly 22' by 8'), metal-clad switchgear (15' by 8'), battery system (batter rack, charger, AC panel, DC panel), and controls for operation of the equipment.

At the new location, we will keep similar dimensions for the substation and the building. The transformers, voltage regulators, generator, metal-clad switchgear, and batteries will all be moved to the new location. We propose a new fuel tank and new generator controls meeting current standards beinstalled at the new site, rather than move the existing out of date tank and controls. A new building will be constructed. Rather than the existing wood pole electrical substation structure, we will replace that design with a steel structure that is 17' by 15'.

We see a need for a new circuit breaker (4kV) within the substation which would be essential for bypassing the metal-clad switchgear in emergency situations or whenever maintenance is required on the metal-clad switchgear. One of the deficiencies identified with the existing substation is the inability to perform maintenance on the metal-clad switchgear. If the switchgear were to fail, the new substation can bypass the switchgear by using the bypass breaker for system protection.

With the new location, the 4kV electrical distribution circuits will need to be tied to the existing electrical distribution system in La Farge. Four (4) new underground circuits will exit the substation and will need to tie into the existing system in specific areas of town, connecting to the overhead lines with new risers. Each circuit consists of (3) medium voltage cables, and some modifications will be required on the existing overhead distribution lines for these connections. We estimate approximately 2,900 linear feet of new underground installations, and 800 linear feet of overhead installation/modifications.

C.2. A statement verifying that the project components described in the engineering report are consistent with the EDA investment project description that is provided in Section B.2 of Form ED-900. Engineering reports that describe project components that are inconsistent with the EDA investment project description in Section B.2 of Form ED-900 will not be considered valid.

The Village of La Farge operates an electric distribution utility to provide electric service to the residents of the Village and surrounding area. The utility has two sources of power – a single radial connection to the electric grid and a local diesel generator. The generator can be operated in parallel with the electric grid or independently in the event of loss of the source from the electric grid. Both the normal supply from the electric grid and the standby supply from the generator feed into a metal-clad switchgear which then distributes power to four distribution circuits to the utility customers.

Twice within the last 12 years, floods have damaged the metal-clad switchgear and the standby generator. To bypass the damaged equipment, temporary cables were laid across the ground to bypass the metal-clad switchgear until repairs could be completed months later.

To address this problem, the proposed project is two-fold. First solution is to re-locate the existing electrical substation, metal-clad switchgear, and generation to another location in the Village which has not experienced flooding. Site development work associated with the re-location includes a new substation yard, generator/switchgear building, and connections to the existing electrical lines. The second solution adds a permanent bypass of the metal-clad switchgear using equipment at least 4 feet above grade. The bypass will allow routine maintenance on the metal-clad switchgear and is even more flood resistant than the equipment re-located to higher ground.

The proposed project is required for the Village of La Farge to reliably serve its electric utility customers and to avoid lengthy outages and expensive repairs during flood events. Reliable electric supply is essential to the success of existing businesses and for attracting new economic development.

C.3. Drawings showing the general layout and location of the existing site conditions and of the project components as well as location of any project beneficiary identified in Section B.9 of Form ED-900 that provide economic justification for the project, if any. Rough dimensions and quantities for major project components should be shown and labeled on the drawings. Drawings should clearly identify the project components that are being proposed. Applicants are encouraged to clarify such drawings, for example, through color coding, labeling, and other appropriate methods.

There are 4 attached drawings to show this. The existing substation site and details are shown, and we have laid out a preliminary plan for the proposed facilities. There is a map showing the existing substation site and the proposed site. The beneficiaries of the project are every electrical utility customer of La Farge Municipal Utilities.

C.4. A feasibility analysis for the constructability of the project. Include a review of the existing conditions and note particular features, alignments, and circumstances affecting construction of project components.

The substation will be moved to a new location outside of the 500-year flood plane. The new location requires sitework which will clear vegetation, and then raise the current elevation. Fill will be delivered to the site, and subgrade stabilization will be required. After elevating the substation area to the desired elevation, the substation can be constructed using conventional

substation construction techniques. Reinforced concrete foundations will be constructed and the equipment and steel structure will be secured to the foundations via anchor bolts. There are no special construction techniques needed or extraordinary circumstances that pose a challenge to reconstructing the substation. The existing substation will remain in service during the construction at the new site, where a new bypass breaker will be installed. The generator will run at the existing site to supply power to all customers while the substation equipment is re-located to the new site. The relocated substation equipment will then operate with the new bypass breaker to supply power to all customers while the generator is moved to the new site.

C.5. The proposed method of construction. Indicate whether construction procurement will be done through competitive bid or other method. Indicate if any portion of the project is to be done by design/build, construction management at risk, the applicant's own forces, or a third-party construction manager. If an alternate construction procurement method (other than traditional design/bid/build with sealed competitive bid process) is proposed, a construction services procurement plan must be provided to EDA for approval in accordance with EDA's regulation at 13 C.F.R. § 305.6(a).

The equipment and labor for the project will be awarded via competitive bidding procedures as detailed in Wisconsin State Statute 66.0901- Public works, contracts, bids. Construction management will be conducted by Forster Electrical Engineering with assistance by La Farge Utility.

C.6. The number of construction contracts anticipated. If multiple contracts are proposed, describe the project components included in each contract. If separate contracts are anticipated for demolition or site work, the budget information cost classification should reflect the estimated costs for these components. If project phasing is proposed, a project phasing request must be provided to EDA for approval per EDA's regulation at 13 C.F.R. § 305.9(a).

One labor of construction contract is anticipated for a general contractor to complete the whole project, including the site work and building construction. There are also 3 anticipated procurement contracts for equipment: substation breaker, substation structure and materials, and new generator controls.

C.7. A current detailed construction cost estimate for each of the project components. Show quantities, unit prices, and total costs and provide a basis for the determination of construction contingencies. The total of this estimate should match the construction line item of the SF-424C.

Please see attached. "Exhibit C11"

C.8. Real property acquisition. If the budget includes costs for acquisition of real property, include a current fair market value appraisal completed by a certified appraiser for the property to be purchased.

Property is currently owned by La Farge

C.9. A list of all permits required for the proposed project and their current status. Identify all permits required; include the timeline to obtain the permits and discuss how the permitting relates to

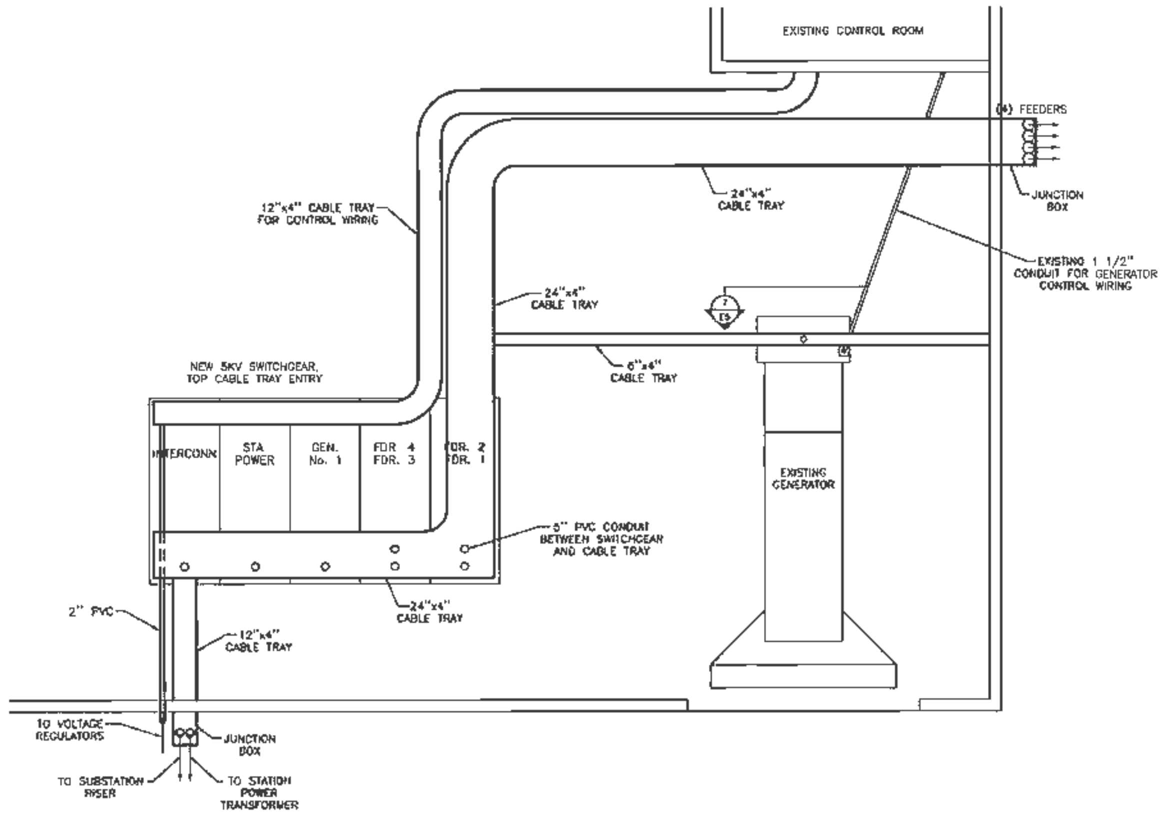
the overall project schedule. If the project crosses a railroad right-of-way or is within a railroad right-of-way, explain any permitting or approvals that may be required from the railroad or other authority and the timeframe for obtaining these permits or approvals.

A Certificate of Authority from the Wisconsin Public Service Comission will be needed. Obtaining the CA is typically 4-6 months, and will address the need for the project, and review any environmental or historical impact. This project will require a Wetland Fill Permit as well as a Floodplain Fill Permit. We will follow any other permits as deemed necessary by the Municipality.

C.10. An overall estimated project schedule. This schedule should agree with the project schedule outlined in the ED-900. Include the number of months for each of the following:
i. design period;
ii. period of time to obtain required permits;
iii. period of time to obtain any required easements or rights-of-way;
iv. solicitation of bids and awarding of contracts, and
v. construction period.

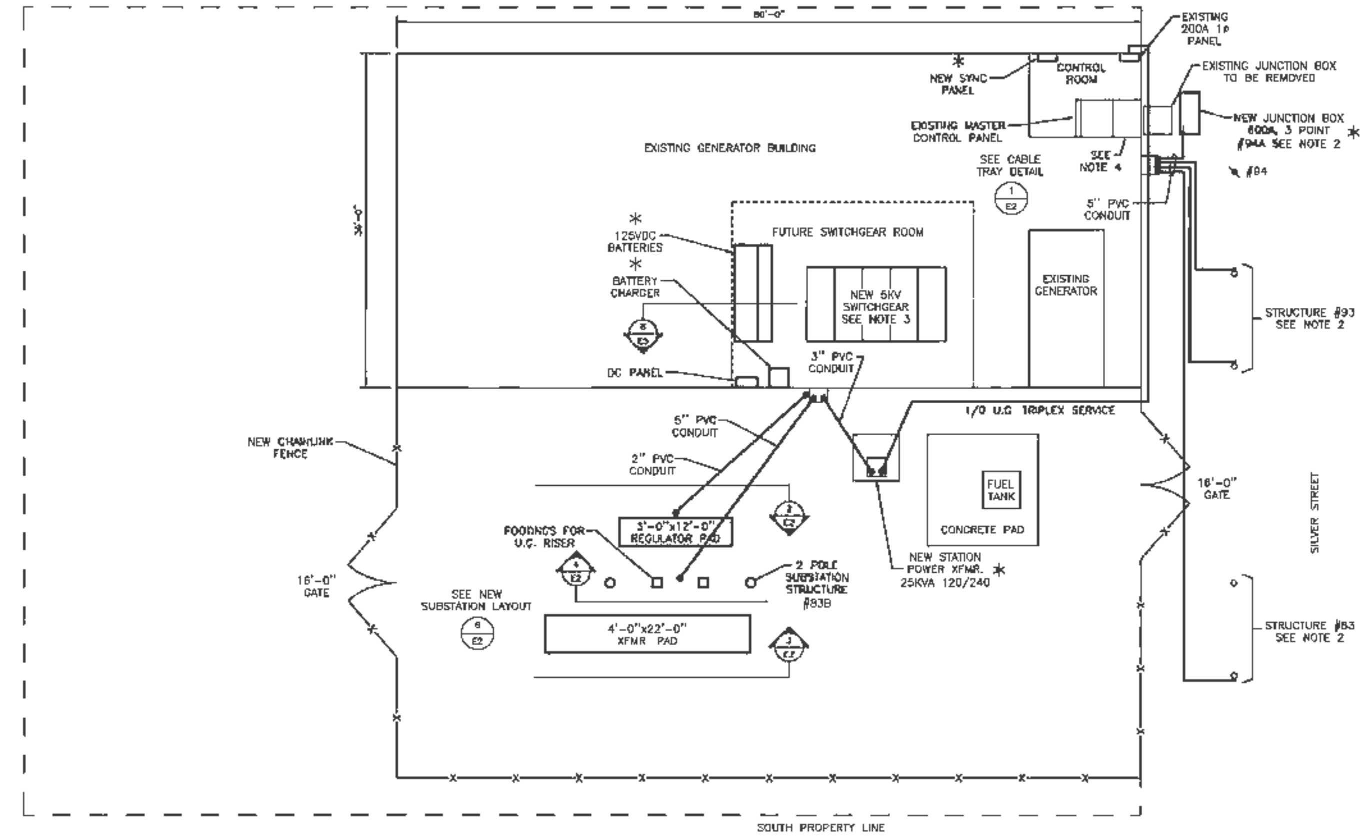
Please see attached. "Exhibit C10"

C.11. Overall project budget breakdown. For each "cost classifications" line item that the applicant indicates will be included in the project budget on Form SF-424C, the applicant must provide a breakdown of the proposed project costs and tasks that is consistent with the detailed construction cost estimate for the project provided in the PER.
Please see attached. "Exhibit C11"



1 / E2 CABLE TRAY PLAN

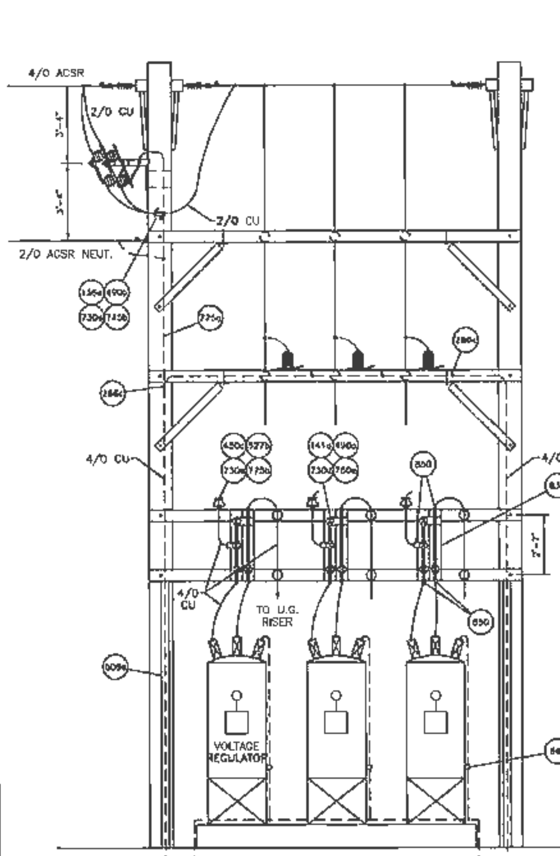
SCALE: 1/4"=1'-0"



SITE PLAN

SCALE: 1"=10'

NORTH

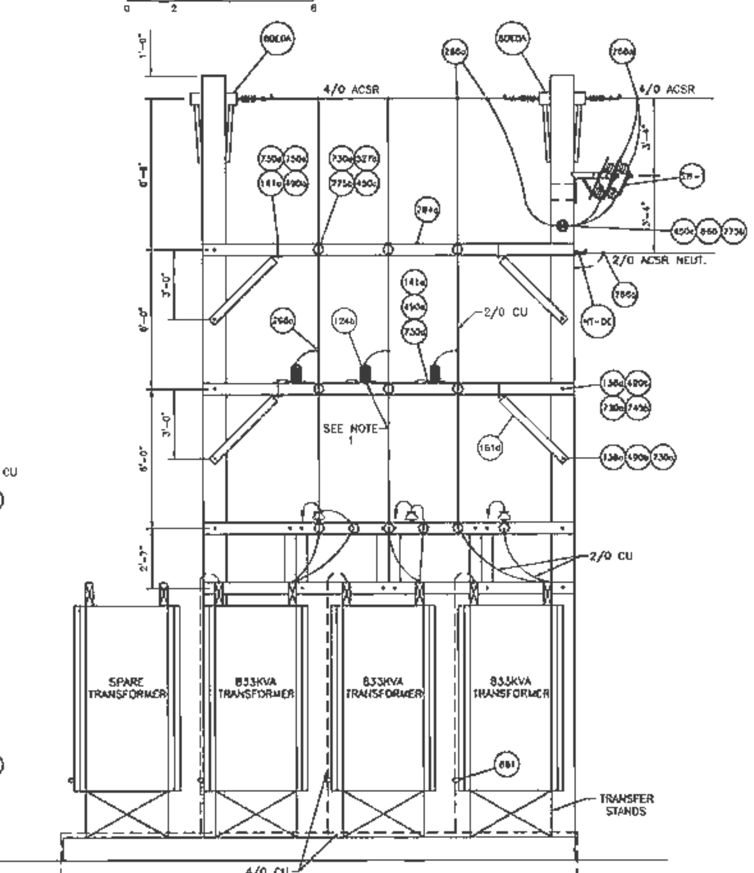


4/0 CU TO GROUND GRID

4/0 CU TO GROUND GRID

2 / E2 NORTH ELEVATION

SCALE: 1/4"=1'-0"



4/0 CU TO GROUND GRID

4/0 CU TO GROUND GRID

3 / E2 SOUTH ELEVATION

SCALE: 1/4"=1'-0"

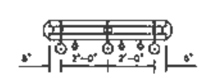
NOTES

1. CONTRACTOR SHALL FURNISH AND INSTALL 1/4" GALVANIZED STEEL PLATE TO USE FOR MOUNTING ARRESTORS ON WOOD CROSSARMS.

2. SEE STRUCTURE DRAWINGS IN APPENDIX D

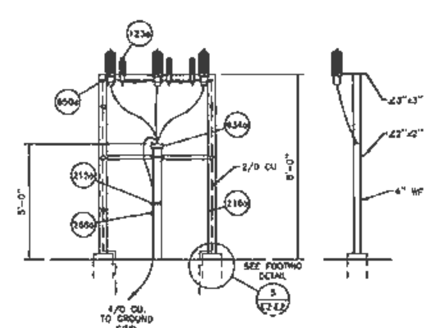
3. SEE SWITCHGEAR DRAWINGS IN APPENDIX E.

4. CONTRACTOR SHALL REMOVE EXISTING GENERATOR LEADS, TWO 400A CONTACTORS, FOUR PT'S AND FOUR CT'S



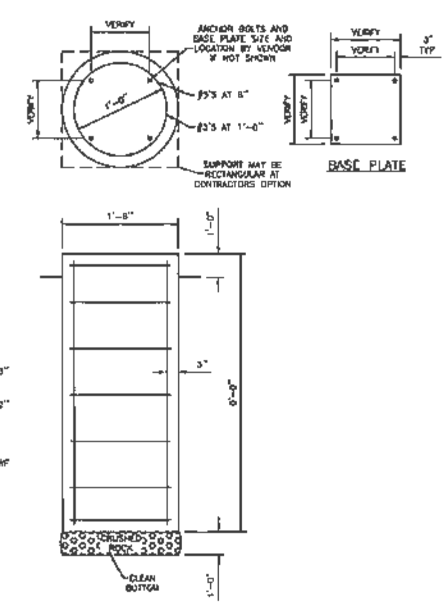
TERMINATOR STR. PLAN VIEW

SCALE: 1/4"=1'-0"



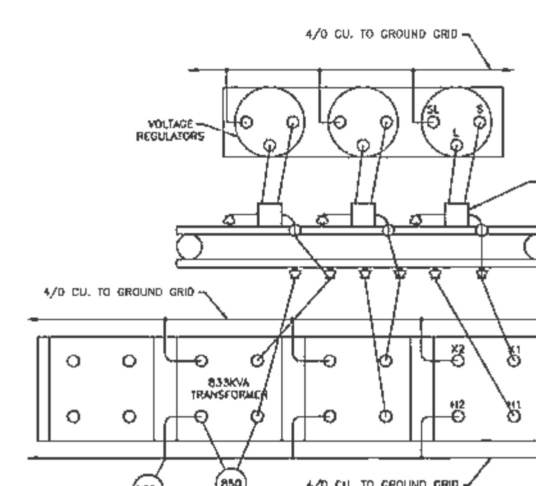
4 / E2 TERMINATION STRUCTURE

SCALE: 1/4"=1'-0"



5 / E2 FOOTING DETAIL

SCALE: N.T.S.



6 / E2 NEW SUBSTATION LAYOUT

SCALE: N.T.S.

SEH

10901 RED CIRCLE DRIVE
SUITE 200
MINNETONKA, MN 55343
PHONE: 952.912.2600
FAX: 952.912.2601
WATTS: 800.734.6757
www.sehinc.com

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.

MICHAEL D. THELEN

DATE ____ LICENSE NO. E22524

LA FARGE ELECTRIC UTILITY SYSTEM IMPROVEMENTS

LA FARGE, WISCONSIN

MARK	DATE	DESCRIPTION

REVISIONS

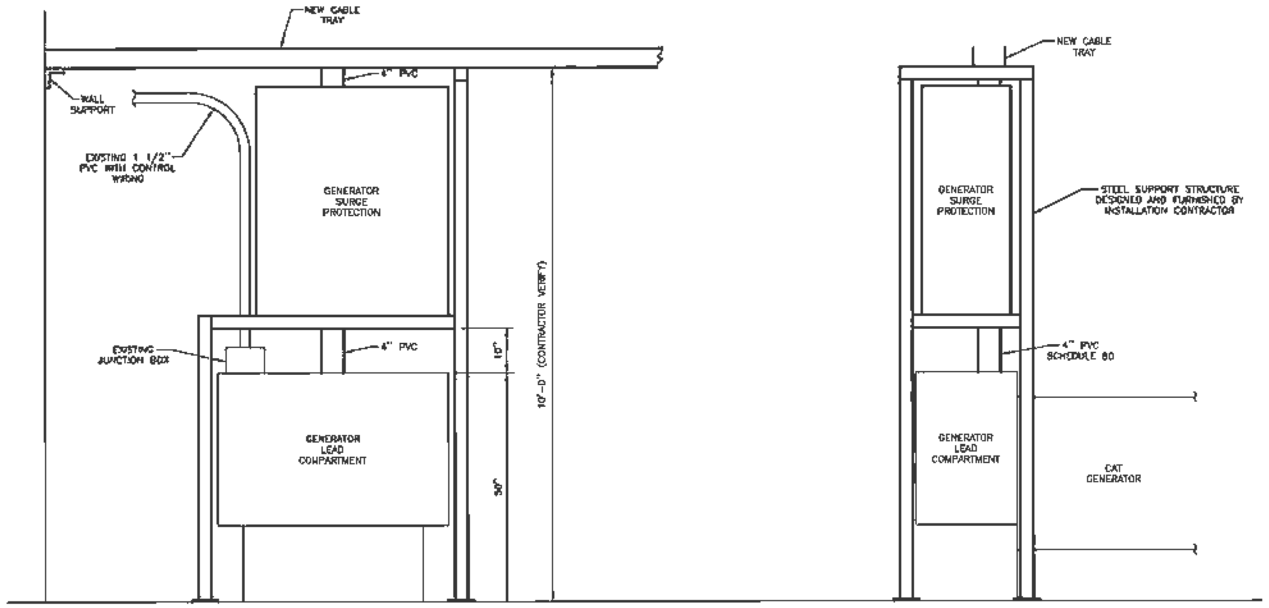
SEH FILE NO. ALAFAR0502.00
CITY PROJECT NO.
ISSUE DATE 1/9/06
DESIGNED BY DLO
DRAWN BY PGM

SHEET TITLE

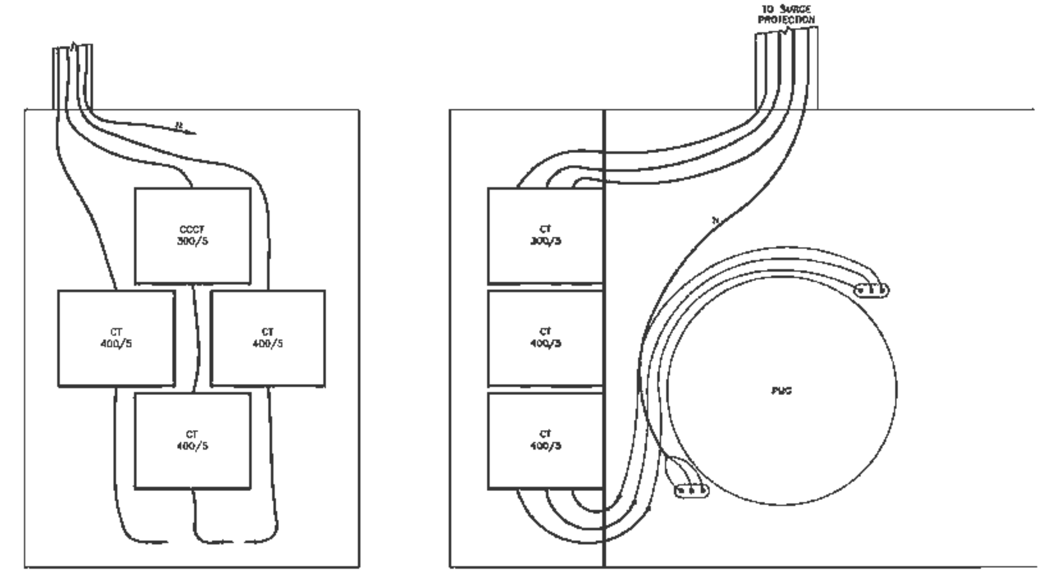
SUBSTATION SITE PLAN AND DETAILS

SHEET

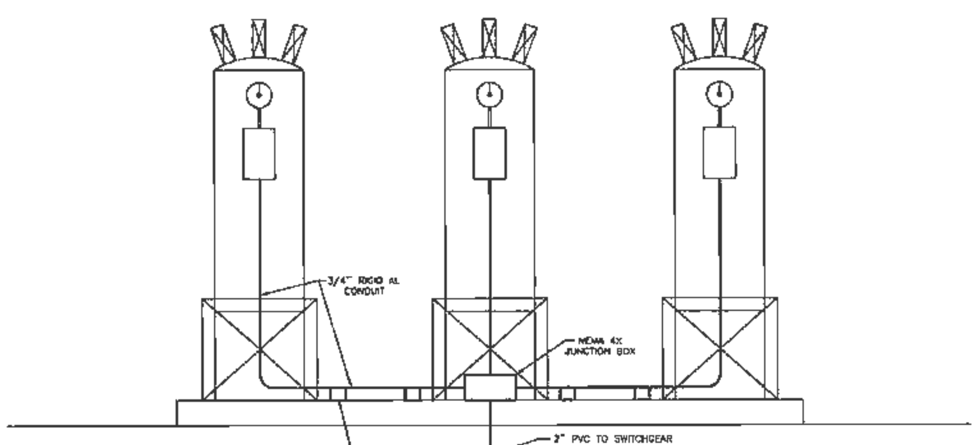
E2 OF 5



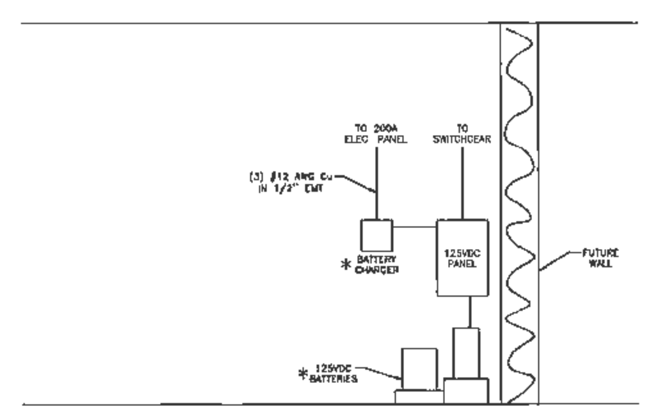
NORTH ELEVATION–GEN. SURGE PROTECTION
E5
SCALE: N.T.S.



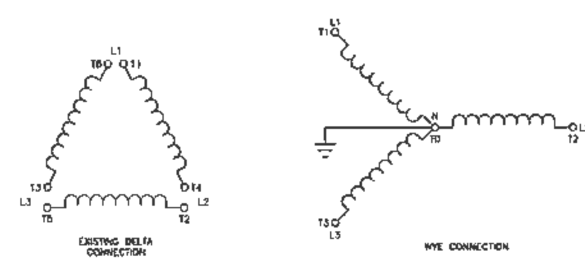
GENERATOR LEAD COMPARTMENT DETAILS
SCALE: N.T.S.



NORTH ELEVATION–VOLTAGE REGULATORS
SCALE: N.T.S



8
E5
NORTH ELEVATION–SOUTH BLDG. WALL
SCALE: N.T.S.



NOTE: CONTRACTOR SHALL VERIFY WYE CONNECTION WITH CONNECTION DIAGRAM INSIDE GENERATOR LEAD COMPARTMENT

GENERATOR CONNECTION DIAGRAM
SCALE: NONE

SEH
10901 RED CIRCLE DRIVE
SUITE 200
MINNETONKA, MN 55343
PHONE: 952.912.2600
FAX: 952.912.2601
WATTS: 800.734.6757
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I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.

MICHAEL D. THIELEN
DATE ____ LICENSE NO. E22324

LA FARGE ELECTRIC UTILITY SYSTEM IMPROVEMENTS

LA FARGE, WISCONSIN

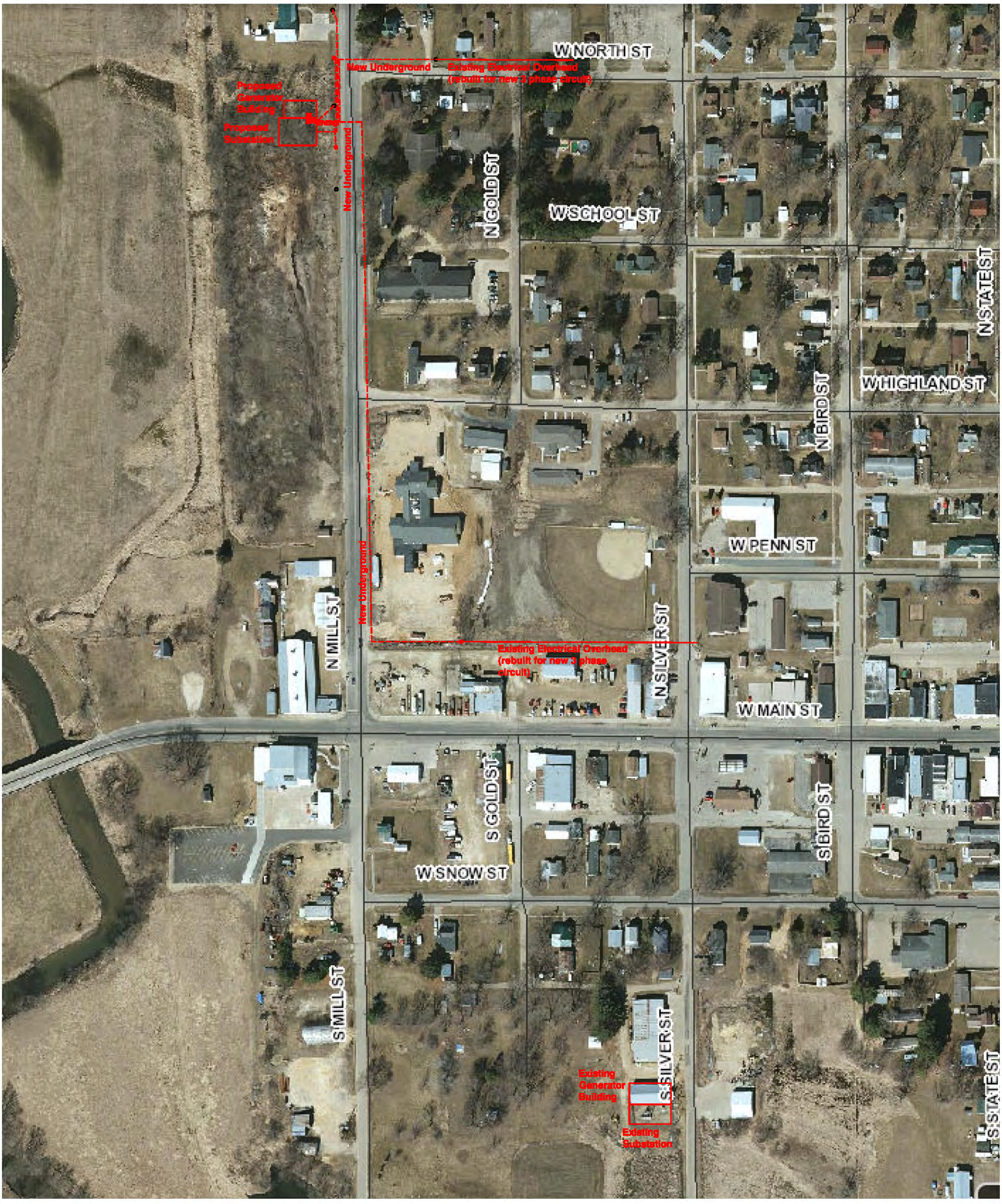
MARK	DATE	DESCRIPTION

REVISIONS

SEH FILE NO. ALAFAR0502.00
CITY PROJECT NO.
ISSUE DATE 1/9/06
DESIGNED BY DLO
DRAWN BY PJE

SHEET TITLE
VARIOUS DETAILS II

SHEET
E5 OF 5



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W E
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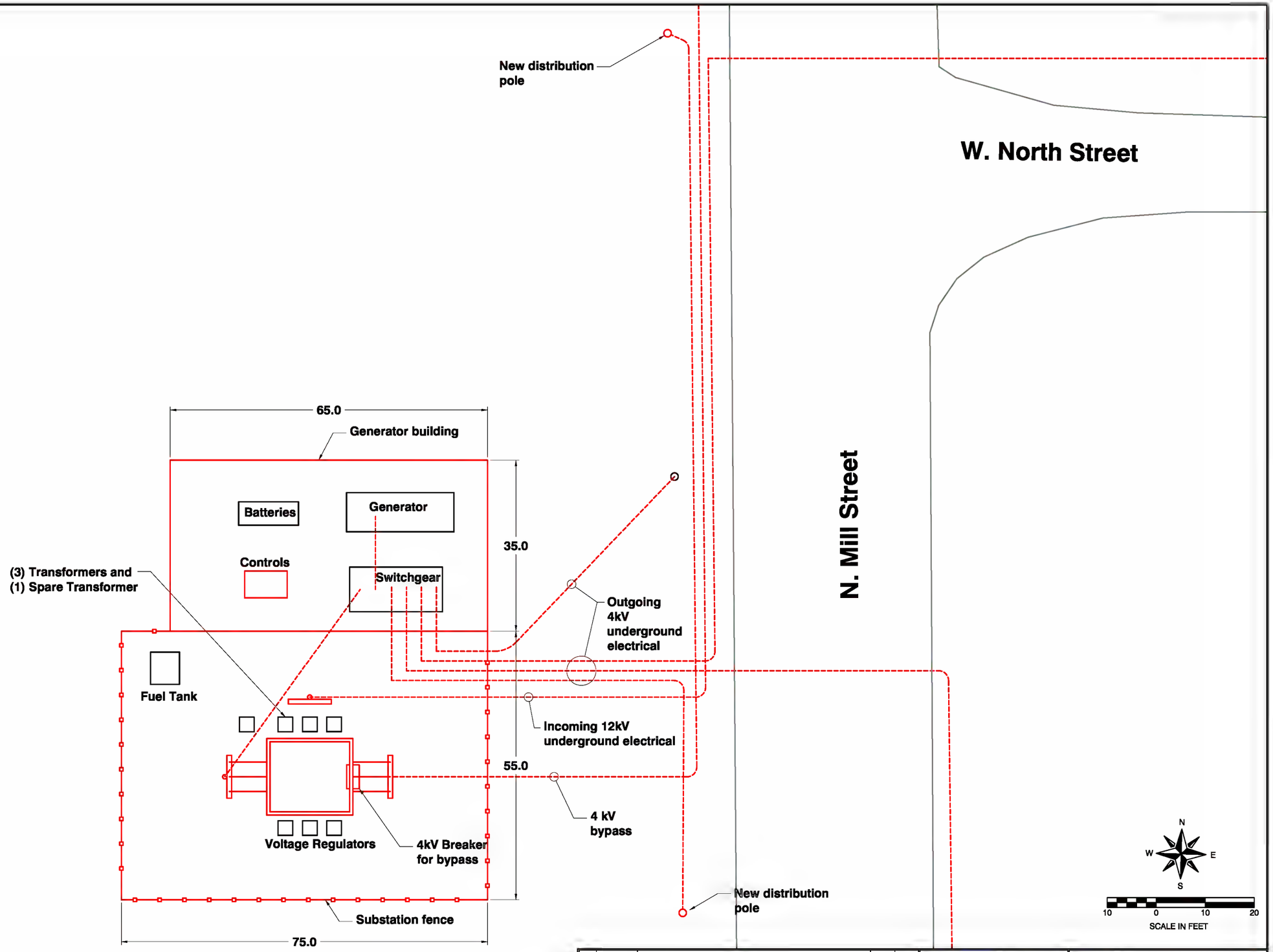
SCALE IN FEET

Rev	Date	Description	Draft	Eng
1	09/16/20	Issued for report	FJW	BWB

Forster Electrical Engineering
550 N. Burr Oak Ave
Oregon WI 53575 (608) 835-9009

La Farge Municipal Utilities
System Planning
Proposed Feeder Plan

Dwg No. **L6-D-20A-E1**



Rev	Date	Description	Draft	Eng
1	09-16-20	Issued for report	FJW	BWB

Forster Electrical Engineering
550 N. Burr Oak Ave
Oregon WI 53575 (608) 835-9009

La Farge Municipal Utilities
System Planning
Proposed Electrical Site Plan

Dwg No. **L06-20A-E2**

La Farge Substation Relocation

		2021												2022												2023	
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB
	CA Application																										
	CA PSC Approval																										
Prelim Design	Prelim (oneline/site) For Review																										
Prelim Design	Prelim Owner Comments																										
Prelim Design	Prelim (oneline/site) Final Revisions																										
	Procurement-Docs (Equip/Matl)																										
	Procurement-Bid (Equip/Matl)																										
	Procurement-Manufacturing (Equip/Matl)																										
Final Design	Construction Dwgs For Review																										
Final Design	Construction Dwgs Owner Comments																										
Final Design	Construction Dwgs Final																										
Bidding	Construction Bidding																										
Construction	Construction																										
Post Const.	Checkout																										
Commission	Commission																										

EXHIBIT C10

La Farge Municipal Utilities
Substation Relocation Estimate
Forster Electrical Engineering

			Labor	Materials
Equipment purchases				
	Structure and materials		$ 45,000	$ 115,000
	4kV Circuit Breaker (for bypass)			$ 21,000
	Generator and switchgear control panel		$ 5,000	$ 25,000
	Substation communications		$ 4,000	$ 15,000
	Regulator controls		$ 4,000	$ 15,000
Site Development				
	Grading		$ 175,000	
	Ground grid		$ 40,000	
	Fencing		$ 25,000	
	Building construction and design		$ 225,000	
	Foundations		$ 130,000	
	Fuel tank oil containment		$ 45,000	
One week of generation				$ 77,000
Electrical construction				
	Conduit and cable		$ 50,000	
	Crane/Move generator & equipment		$ 30,000	
	Equipment install		$ 20,000	
	Wiring		$ 25,000	
	Distribution construction/connections		$ 150,000	$ 55,000
	Removal/Restoration at old sub		$ 7,500	
Commissioning			$ 25,000	
Subtotal		$ 1,328,500	$ 1,005,500	$ 323,000
Engineering		$220,000		
Contingency (15%)		$ 199,300		
TOTAL		**$ 1,747,800**		

EXHIBIT C11

La Farge Community Solar Initiative

Project Description and Goals

2014-2016 Planning w/ Jan. 2021 Update

Community Solar Advisory Committee:

Utility Member
La Farge Municipal Utility

Municipal Government Member
Energy Planning & Information Committee [EPIC] , Town of Stark

Customer Members

Businesses
La Farge Medical Clinic
Organic Valley Cooperative

Residential Customers
Chuck Hatfield
Erin Malone
Brad Steinmetz
Jason Vidas

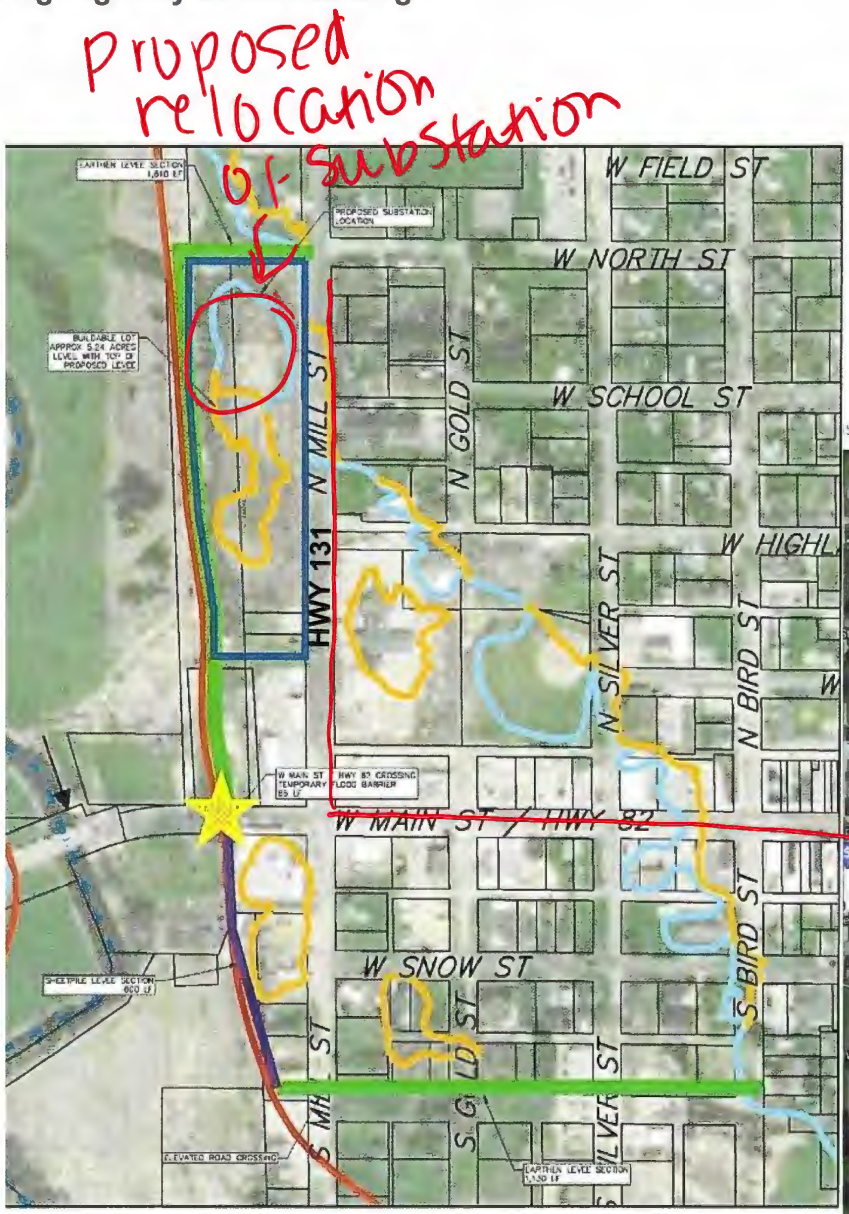
La Farge Community-Owned 800 kW Solar

Updated Siting Plan

January 2021

Underground Electrical Feed Opportunity

During Highway 82 Re-Building



WE ARE ETHOS GREEN POWER

January 2021 UPDATE

729 North Main Street | Viroqua, WI 54665 | 608-637-3797

Date of Quote		
Customer Name		La Farge Community Solar
Customer Address		
System Size		801.0 kW
Mounting/Racking		Ground

Solar Array Equipment and Installation

System components include:

BOVIET 445W	1700	$384,480
Inverters		$57,915
Ground Mount adjustable racking		$200,250
Electrical Design and Installation * LIFETIME warranty *		$344,979

Total Invoice BEFORE Credits & Incentives	**$987,624**
Depreciation	$180,439
26% Federal Tax Credit	$256,782
TOTAL After Incentives	$550,403

La Farge Community-Owned Solar

Updated Financial Esatimate

January 2021

Project Assumptions:		Operating Expenses		
Capacity(800 kW - no grid back-feeding)	800000	O&M	$	2,500
kWh/kW	1.35	Management		$3,000
Solar Power Production (kWh / Year)	1080000	Insurance		$8,000
Price per Watt Installed $	1.23	Annual Rate Increase		2.5%
Capital Cost	$986,400	Inflation		1%
Degradation	0.50%	Reserve Fur	8%	$78,912
Degradation Factor	99.50%	Inv Tax Crec	26%	$256,464
PPA Pricing	$0.045	Tax Rate		21%
SREC Pricing	$0.000	Discount Rate		5.00%

30 Year Financials based on above assumptions

	Years	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	TOTAL
Cash Inflows:																																
	Generation kWh	1,080,000	1,074,600	1,069,227	1,063,881	1,058,561	1,053,269	1,048,002	1,042,762	1,037,548	1,032,361	1,027,199	1,022,063	1,016,953	1,011,868	1,006,809	1,001,774	996,766	991,782	986,823	981,889	976,979	972,094	967,234	962,398	957,586	952,798	948,034	943,294	938,577	933,884	30,157,015
	Rate	0.045	0.046	0.047	0.048	0.050	0.051	0.052	0.053	0.055	0.056	0.058	0.059	0.061	0.062	0.064	0.065	0.067	0.068	0.070	0.072	0.074	0.076	0.077	0.079	0.081	0.083	0.086	0.088	0.090	0.092	
	Power Sales	$48,600	$49,566	$50,551	$51,556	$52,580	$53,625	$54,691	$55,778	$56,887	$58,017	$59,171	$60,347	$61,546	$62,769	$64,017	$65,289	$66,587	$67,910	$69,260	$70,636	$72,040	$73,472	$74,932	$76,422	$77,940	$79,490	$81,069	$82,681	$84,324	$86,000	$1,967,753
	SREC Income	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Total Revenues	$48,600	$49,566	$50,551	$51,556	$52,580	$53,625	$54,691	$55,778	$56,887	$58,017	$59,171	$60,347	$61,546	$62,769	$64,017	$65,289	$66,587	$67,910	$69,260	$70,636	$72,040	$73,472	$74,932	$76,422	$77,940	$79,490	$81,069	$82,681	$84,324	$86,000	$1,967,753
Cash Outflows:																																
	Management	$3,500	$1,500	$1,515	$1,530	$1,545	$1,561	$1,577	$1,592	$1,608	$1,624	$1,641	$1,657	$1,674	$1,690	$1,707	$1,724	$1,741	$1,759	$1,776	$1,794	$1,812	$1,830	$1,849	$1,867	$1,886	$1,905	$1,924	$1,943	$1,962	$1,982	$53,676
	O&M $	2,500	$2,525	$2,550	$2,576	$2,602	$2,628	$2,654	$2,680	$2,707	$2,734	$2,762	$2,789	$2,817	$2,845	$2,874	$2,902	$2,931	$2,961	$2,990	$3,020	$3,050	$3,081	$3,112	$3,143	$3,174	$3,206	$3,238	$3,271	$3,303	$3,336	
	Insurance $	8,000	$8,080	$8,161	$8,242	$8,325	$8,406	$8,492	$8,577	$8,663	$8,749	$8,837	$8,925	$9,015	$9,105	$9,196	$9,288	$9,381	$9,474	$9,569	$9,665	$9,762	$9,859	$9,958	$10,057	$10,158	$10,259	$10,362	$10,466	$10,570	$10,676	$278,279
Net Operating (pretax) Income		$34,600	$37,461	$38,325	$39,207	$40,109	$41,029	$41,969	$42,929	$43,909	$44,909	$45,932	$46,975	$48,041	$49,129	$50,240	$51,375	$52,533	$53,716	$54,924	$56,157	$57,416	$58,702	$60,014	$61,354	$62,723	$64,119	$65,546	$67,002	$68,488	$70,006	$1,548,837
	Depreciation	$503,064	$134,150	$80,490	$48,294	$48,294	$24,147																									
Taxable Income		($468,464)	($96,689)	($42,165)	($9,087)	($8,186)	$16,882	$41,969	$42,929	$43,909	$44,909	$45,932	$46,975	$48,041	$49,129	$50,240	$51,375	$52,533	$53,716	$54,924	$56,157	$57,416	$58,702	$60,014	$61,354	$62,723	$64,119	$65,546	$67,002	$68,488	$70,006	$710,397
	Tax at 35%	($98,377)	($20,305)	($8,855)	($1,908)	($1,719)	$3,545	$8,813	$9,015	$9,221	$9,431	$9,646	$9,865	$10,089	$10,317	$10,550	$10,789	$11,032	$11,280	$11,534	$11,793	$12,057	$12,327	$12,603	$12,884	$13,172	$13,465	$13,765	$14,070	$14,382	$14,701	$149,183
	After Tax Income	($370,087)	($76,385)	($33,311)	($7,178)	($6,467)	$13,337	$33,155	$33,914	$34,688	$35,478	$36,286	$37,110	$37,952	$38,812	$39,690	$40,586	$41,501	$42,436	$43,390	$44,364	$45,359	$46,374	$47,411	$48,470	$49,551	$50,654	$51,781	$52,931	$54,106	$55,304	$561,213
	Add back depreciatio	$503,064	$134,150	$80,490	$48,294	$48,294	$24,147																									
After Tax Operating Income		$132,977	$57,766	$47,180	$41,116	$41,828	$37,484	$33,155	$33,914	$34,688	$35,478	$36,286	$37,110	$37,952	$38,812	$39,690	$40,586	$41,501	$42,436	$43,390	$44,364	$45,359	$46,374	$47,411	$48,470	$49,551	$50,654	$51,781	$52,931	$54,106	$55,304	$1,399,653
Present Value of Cash Flows	5.00%	$738,739																														
Energy Tax Credit		$256,464																														
Total Present Value of Cash Flows		$995,203																														

Project

A 400-1500 kW community solar facility serving the 552 utility customers of the La Farge, WI Municipal utility providing energy savings and environmental benefits over time while lowering peak and other facility costs for the publicly owned utility.

Timetable

Substantially developed by the end of 2016 in order to qualify for Federal Tax Credit Incentives. Fully operational shortly after May 31, 2017.

Location

Within the utility's footprint close to the wholesale supply connection and origin of the utility's distribution. Suitable tract or tracts owned by the village of La Farge as well as other land may be considered. The head end of the distribution lines is located here: http://bit.ly/DistributionHeadEnd-LFMU

Funding

It is believed that costs can be met up front by participating La Farge utility customers with a large percentage coming from significant energy users with environmental, tax and savings incentives. To date, Organic Valley/CROPP and La Farge Medical Center (VMH) and more than 15 residential customers are supporting the initiative. The La Farge Municipal Utility does not expect to have a significant monetary participation.

Management

There is significant interest in the community solar farm being managed by a non-profit cooperative comprised of equipment owning members following an initial 5-6 year start-up phase when tax credits and depreciation are taken. Facility ownership by the Municipal Utility is not expected. Options for solar property transfer between La Farge Utility customers is desired. There is also interest in allowing additional La Farge Utility customers to become Coop members and buy solar equipment additions after the initial start-up period.

Guiding Principles

Community The project should provide benefits to the municipal utility's entire footprint. We believe that the ability to generate, distribute and use electrical power locally will strengthen our self-sufficiency and local economy. We also want to set example of a public utility improving its negotiation powers and influence within the larger energy setting.

Community Solar Advisory Committee This committee will be formalized later this month. We expect membership of 5-7 with 2-3 members representing potential solar participants with tax credit incentives, 2-3 members representing potential solar participants and non-solar electric customers and 2-3 members representing the La Farge Municipal Utility and local government. The committee will select the managing consultant and oversee decision-making among stakeholders through the development process until a managing entity is created.

Power Purchase Agreement In this collaboration between the La Farge Municipal Utility and solar and non-solar customers, the utility must be able to collect appropriate utility operation expenses from solar customers at the value defined by the power purchase agreement. We have studied a number of options using the traditional arrangement where solar members' utility bills are credited for their share of the community solar generation and these have produced respectable savings for solar customers over time while retaining about 26% for the utility for overhead costs. Finding the appropriate amount to preserve for utility overhead will require additional examination of the margin between revenue and all costs associated with wholesale power purchases and accounting for expenses that would be added or avoided when buying the internally produced solar power. We would like to build in incentives for large power customers to lower monthly demand. We also recognize that wholesale pricing structures and many other factors are likely to change over coming years. Because of this and our ability to assess outcomes after a few years, the possibility of including adjustment options in the contract has been raised.

Environmental Goals. The largest participating energy user, Organic Valley, would like to target net zero clean energy for the company's facilities in La Farge. Interest from other large power, commercial and residential users is also strong. With these prospects, a significant reduction in the amount of energy purchased from wholesale sources is possible. We have been advised by the Upper Midwest

Municipal Energy Group (UMMEG) of which LFMU is a member, that a contract with the ability to sell excess renewable energy on the wholesale grid would be considerably more involved. As a result, the community solar farm needs to be sized to not produce more power than La Farge's internal demand under most conditions. Hour-to-hour use data for 2014-2015 is currently being entered into a spreadsheet; preliminary size calculations based on nearby solar production are attached.

Solar Coop Member Benefits. Monetary benefits from solar equipment should be uniform among members. This will require some modifications in the way credit for generated solar power is calculated across the customer types (e.g. residential/commercial and larger power users.)

Community Solar Coop Management and Member Representation. Voting rights pertaining to board and officers and other powers assigned to members should be granted on a one vote per member basis-- not by the amount of solar property a coop member owns.

Cost Goals. Discussions and estimates of benefits to date have assumed that equipment costs including interconnection to the distribution grid can be close to $2 dollars per faceplate watt. The consultant should also provide estimates for services that tax credit and other participants will require during the startup period and afterwards. We have considered dues paid by Coop members to cover these costs as a percentage of solar generation as one option. When possible and cost-effective, individuals and businesses within the utility footprint should be contracted to provide services.

Simplicity when possible. Stakeholders understand that the addition of the community solar farm cannot require significant workload additions for La Farge Municipal Utility employees for billing, maintenance, accounting, legal and other responsibilities. Care should be taken in our planning to avoid unnecessary complexity in production data collection, billing procedures and communications between the utility and its customers. All work that cannot be comfortably absorbed into usual LFMU process should be absorbed by the community solar farm cooperative.

La Farge Municipal Utility 2014 Data - From WEGS Annual Report to PSCW

2014: http://psc.wi.gov/pdffiles/annlrpts/WEGS/WEGS_2014_2950.pdf
2013: http://psc.wi.gov/pdffiles/annlrpts/WEGS/WEGS_2013_2950.pdf
2012: http://psc.wi.gov/pdffiles/annlrpts/WEGS/WEGS_2012_2950.pdf

Member: Upper Midwest Municipal Energy Group (UMMEG)
Energy sold to all customer types: 7,548,000 kWh
Average Monthly Peak: 1,403 kW
Annual/Winter Peak: 1613 kW (January)
Summer Peak: 1598 kW (July)
Average 24 Hr Load: 862 kW (7,548,000 kWh / 8760 hours)
Average Load Factor: 66.134 (average load divided by the peak load)
Back-Up Generation: 1.5 MW Diesel

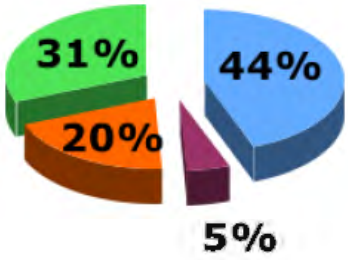
		Monthly Peak				Monthly Energy Usage (kWh) (000's)
Month (a)		kW (b)	Day of Week (c)	Date (MM/DD/YYYY) (d)	Time Beginning (HH:MM) (e)	(f)
January	01	1,613	Monday	01/06/2014	06:00	873
February	02	1,569	Tuesday	02/11/2014	08:00	787
March	03	1,557	Monday	03/03/2014	09:00	748
April	04	1,232	Friday	04/04/2014	12:00	618
May	05	1,281	Tuesday	05/27/2014	01:00	591
June	06	1,415	Friday	06/27/2014	01:00	643
July	07	1,598	Tuesday	07/22/2014	05:00	649
August	08	1,512	Monday	08/25/2014	04:00	680
September	09	1,302	Thursday	09/04/2014	05:00	572
October	10	1,083	Thursday	10/30/2014	11:00	582
November	11	1,301	Monday	11/24/2014	06:00	662
December	12	1,382	Tuesday	12/30/2014	07:00	510
Total		16,845				7,915

	Revenue	Expenses
2014 Total Sales of Electricity	$844,911	
Power Purchases		$458,970
Distribution Expenses		$81,900
Customer Accounts Expenses		$44,253
Other Operation & Maintenance Expense		$102,357
Depreciation & Taxes		$141,817
Net Operating Income:	$15,614	

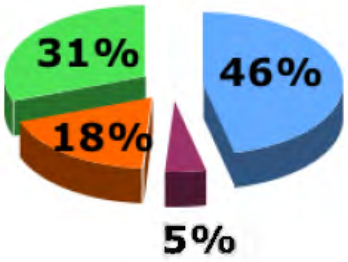
Use and Revenue by Customer Type

Sector	# Customers	kWhs / year	Avg Per Cust/ Yr	% of Total Use
Residential	432	3,302,000	7,644	43.7%
Small Power	2	390,000	195,000	5.2%
Lrg Power	5	1,466,000	293,200	19.4%
Gen Commercial	108	2,332,000	21,593	30.9%
Public Street Lights	4	56,000	14,000	0.7%
Athletic	1	1,000	1,000	0.0%
Area Light	0	1,000	1,000	0.0%

Sector	Rate Revenue	PCAC Revenue	Peak Revenue^	Total Revenue
Residential	$361,145	$21,278	$0	$382,423
Small Power	$35,819	$2,620	$923	$38,439
Lrg Power	$138,800	$10,345	$6,400	$149,145
Gen Commercial	$237,614	$14,605		$252,219
Public St Lights	$19,001	$368		$19,369
Athletic				
Area Light				
			^excluded from total Reveue	



Percentage of
LFMU Use



Percentage of
LFMU Revenue

Residential Electric Customers

Large Power Users

Small Power

Commercial & General Users

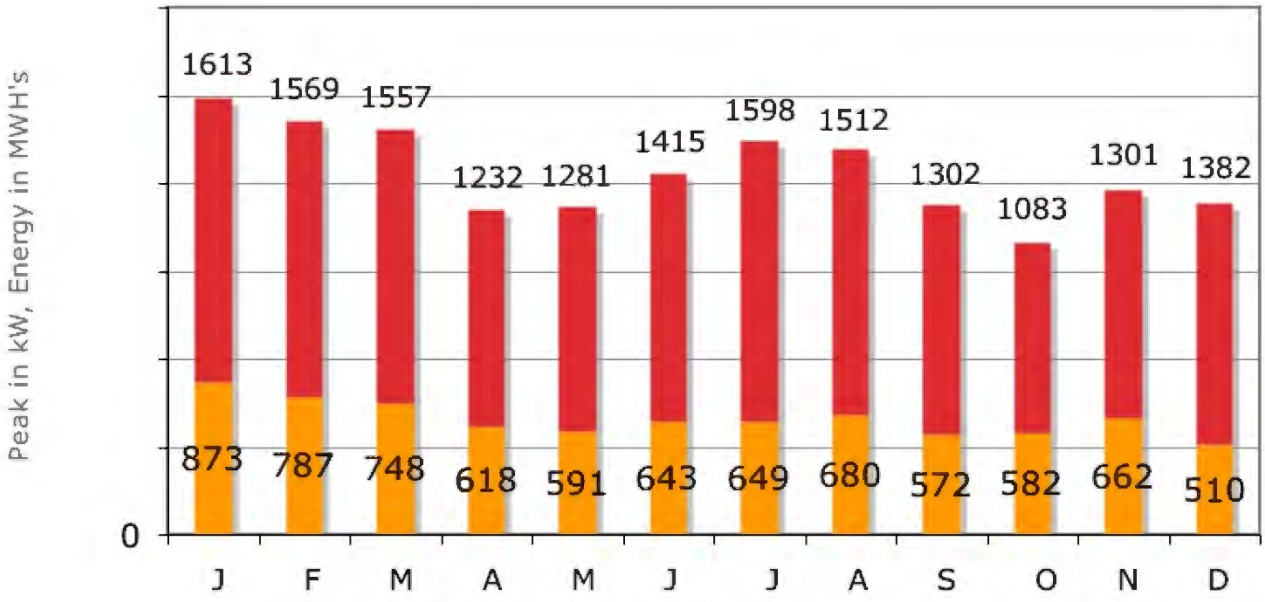
LA FARGE ELECTRIC SERVICE RATES

Effective 3/20/09

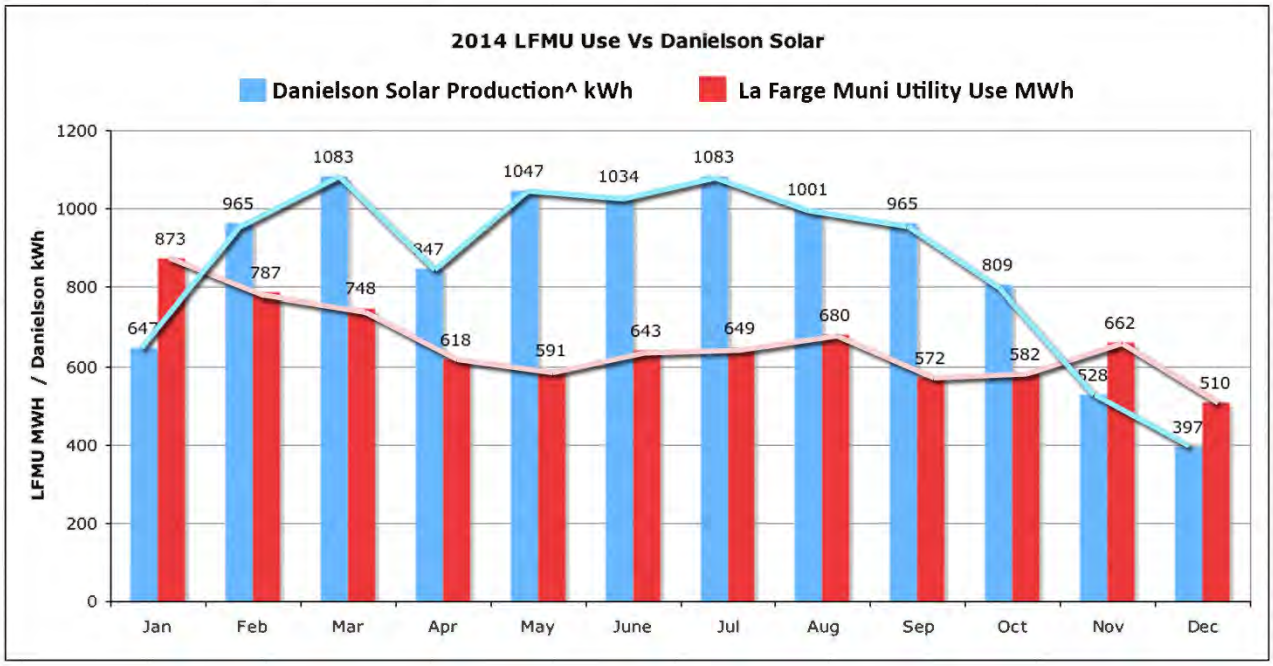
Residential:.	$ 6.00 per mo. .1000 per kwh plus PCAC
General:.	$ 6.00 per mo. (single-phase) $12.00 per mo. (three-phase) .1000 per kwh plus PCAC
Small Power:	$30.00 per mo. $ 1.00 per kw of highest monthly maximum measured demand $ 5.50 per kw of billed demand .0751 per kwh plus PCAC
Large Power:	$50.00 per mo. $ 1.00 per kw of highest monthly maximum measured demand $ 6.00 pr kwh. of billed demand .0616 per kwh plus PCAC

2014 La Farge Municipal Utility

2014 Monthly Peaks & Energy Use

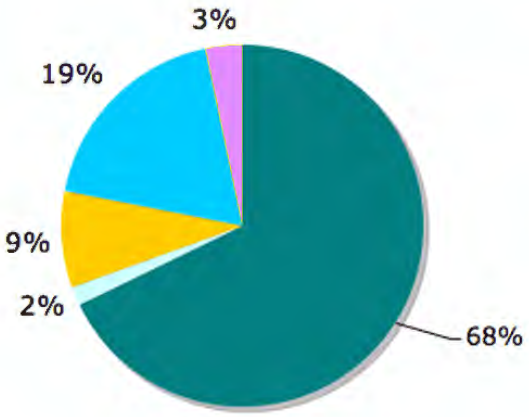


Nearby Solar Production for Reference



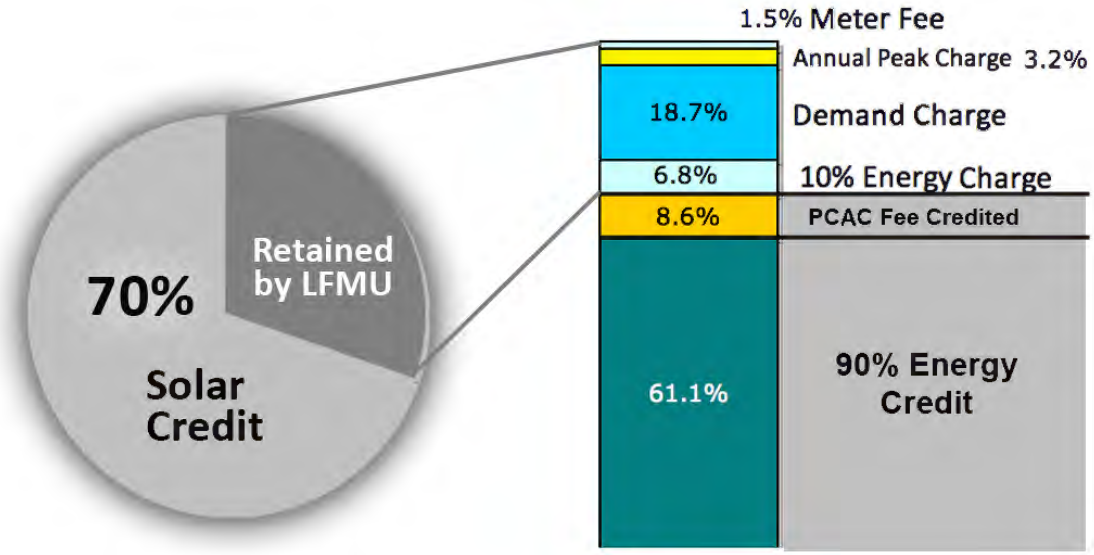
^8.1 kW fixed mount, facing due south; tilt at 45 degrees, river bottom 30' above river elevation; 32-255 watt Helios brand panels; M215 Enphase inverters; imstalled Dec., 2010; solar production 1.30 kWh per year /watt faceplate; Maximum peak 7200 watts (88% of faceplate rating of 8100 watts).

Large Power User Electricity Charge Distribution



	Percentage
Energy Charge	67.9%
Meter Fee	1.5%
PCAC	8.6%
Demand Charge	18.7%
Annual Peak Charge	3.2%

Draft Sample of Large Power Solar Credit Modeling



Sizing the Solar Facility

We are in the process of determining the optimum size for the facility. This is partly dependent on meeting all or part of Organic Valley's and other participants' clean energy goals, if we count the renewable energy in the power purchased from the grid, and limitations of power demand within the LFMU footprint.

These are three sizing factors we are aware of:

- The amount of energy currently used by Organic Valley, the La Farge Medical Center and other solar participants—particularly those, like Organic Valley, that wish to offset as much of their use as they can with solar energy generation. Organic Valley used more than 20% of the power sold by LFMU in 2014.
- For net zero energy targeting, if and how to account for renewable energy LFMU is currently purchasing-- currently about 18% of the wholesale power paid for by LFMU is from the Cashton Greens wind turbines and 9% from the Rugby Wind Farm in North Dakota (both under UMMEG contract).
- UMMEG counsel has advised that a PPA to sell excess generation from LFMU to the grid would be very complicated and challenging. We are content to work within this restriction and size the facility so that the solar power is consumed within the LFMU footprint for economic efficiency. This is likely to involve examining occurrences of peak sun during low use conditions including weekends. Hour-to-hour LFMU demand information from 2014 and 2015 is currently being entered into a spreadsheet to help with this analysis.

In the interim, here are a two reference computations based on solar production from nearby, similarly-located solar arrays generating 1.30 kWh/watt/year.

A. 1.2 MW Reference Size

Solar Participants - Start-Up Phase	**kW**
Organic Valley CROPP^	1000
La Farge Medical Clinic^	60
La Farge Trucking Center^	20
5 Commercial Users @10kW ea.	50
15 Residential Users @5kW ea.	75
Total	**1205**

^ Tax Credit Investor

1.2 MW annual solar production estimate: 1,560,000 kWh
Solar efficiency (computed from nearby, low-lying, solar arrays) .1532
2014 LFMU energy sold: 7,548,000 kWh
1.2 MW annual solar production as percentage of 2014 LFMU energy sold: 20.67%

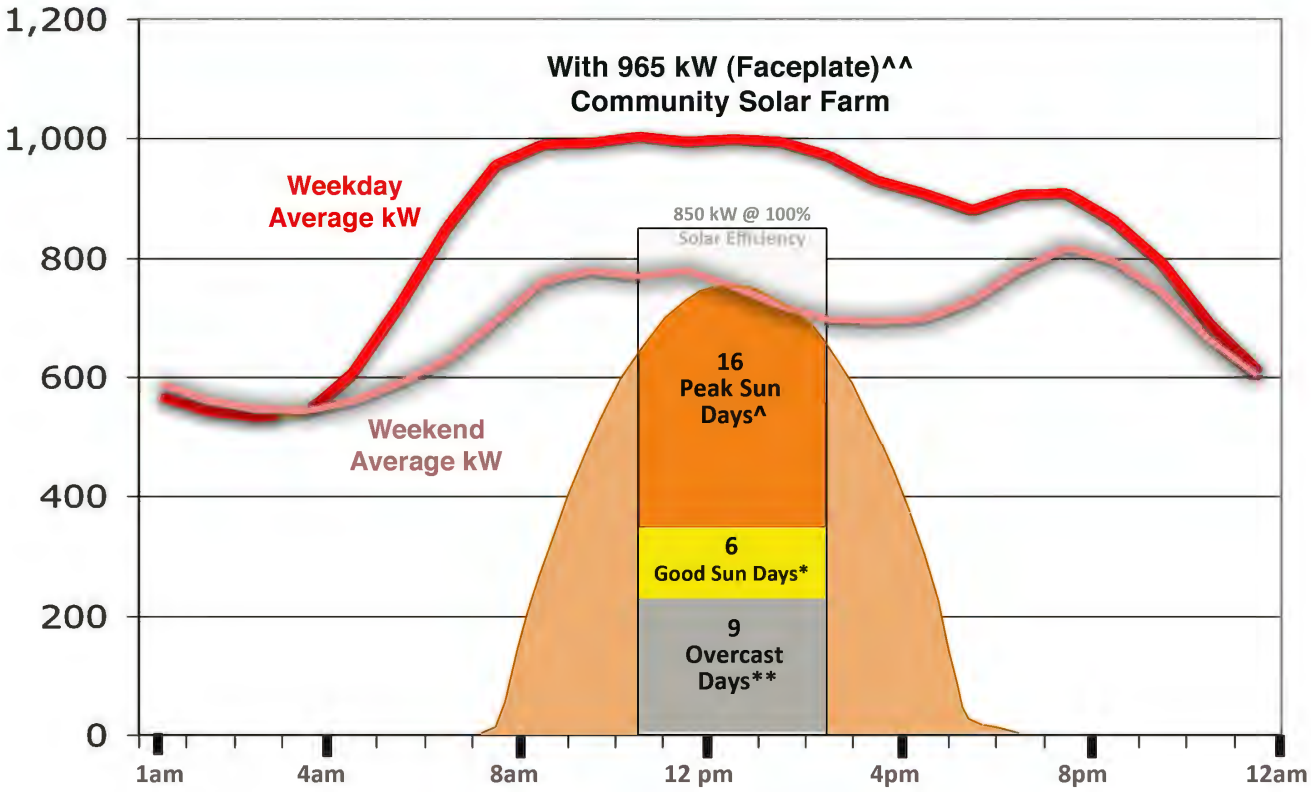
B. 900 kW Reference Size

Solar Participants - Start-Up Phase	**kW**
Organic Valley CROPP^	700
La Farge Medical Clinic^	60
La Farge Trucking Center^	20
5 Commercial Users @10kW ea.	50
15 Residential Users @5kW ea.	75
Total	**905**

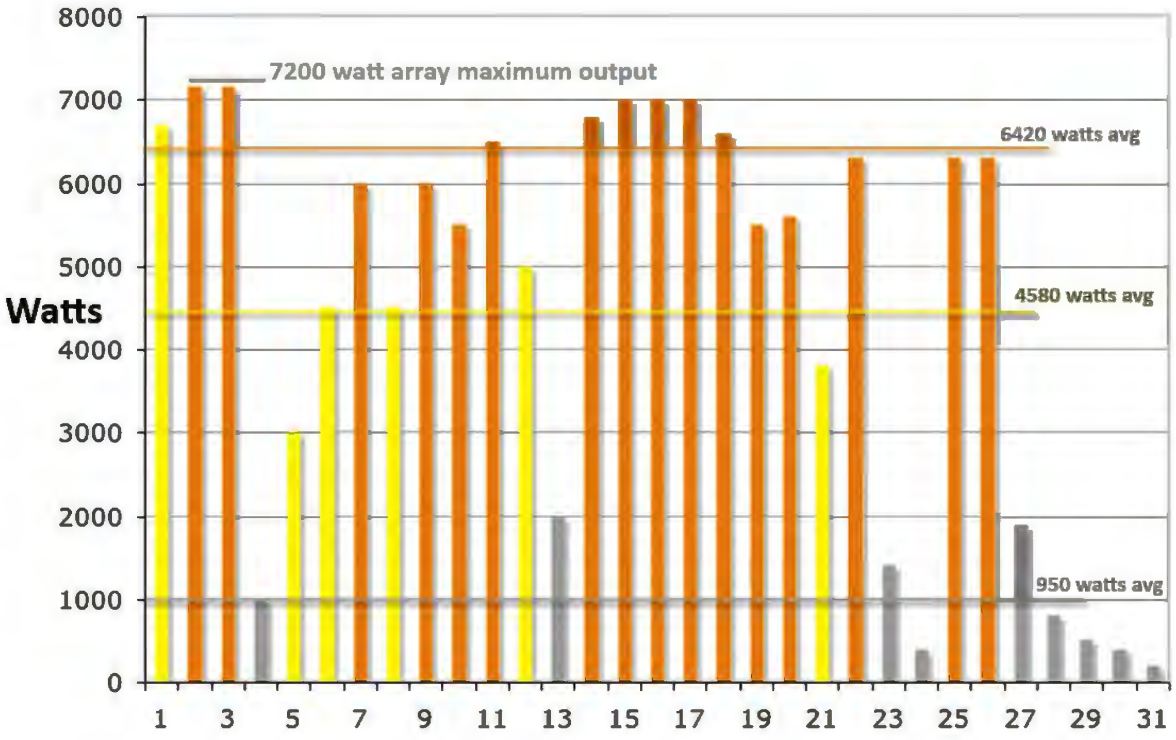
^ Tax Credit Investor

900 kW annual solar production estimate: 1,156,354 kWh
Solar efficiency (computed from nearby, low-lying, solar arrays) .1532
2014 LFMU energy sold: 7,548,000 kWh
900 kW annual solar production as percentage of 2014 LFMU energy sold: 15.5%

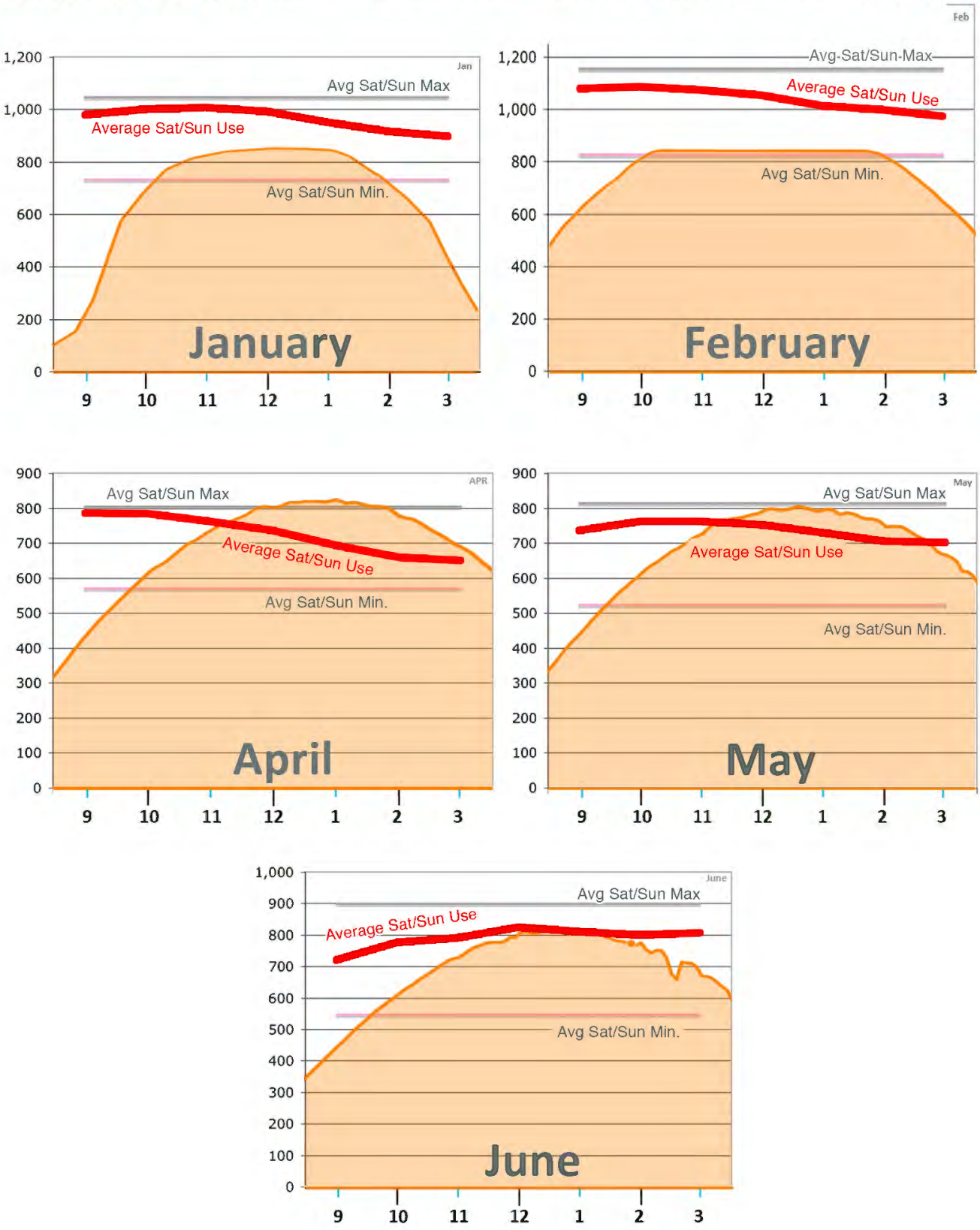
October 2015 LFMU Average Daily Energy kW Use vs. Solar Production



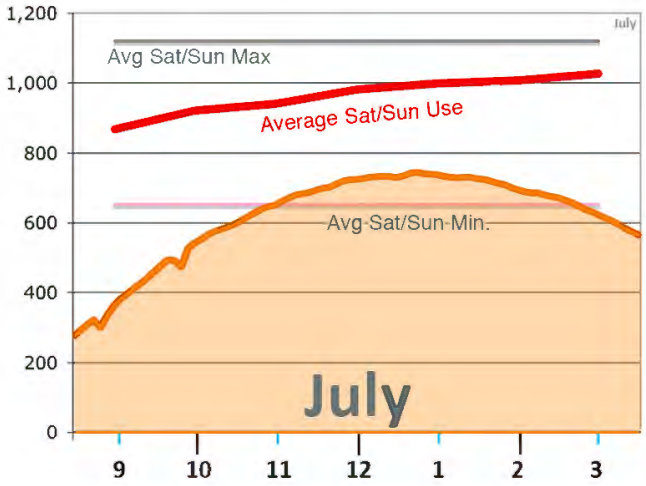
^^ Based on 89% of peak production from a 850 kW array at 88% of its faceplate rating.
^ Minimally interrupted solar production from 10:30am -2:30pm averaging 89% of ref. solar array max peak output
*Partially interrupted solar production from 10:30am -2:30pm averaging 64% of ref. solar array max peak output
**Significantly interrupted solar production from 10:30am -2:30pm averaging 13% of ref. solar array max peak output

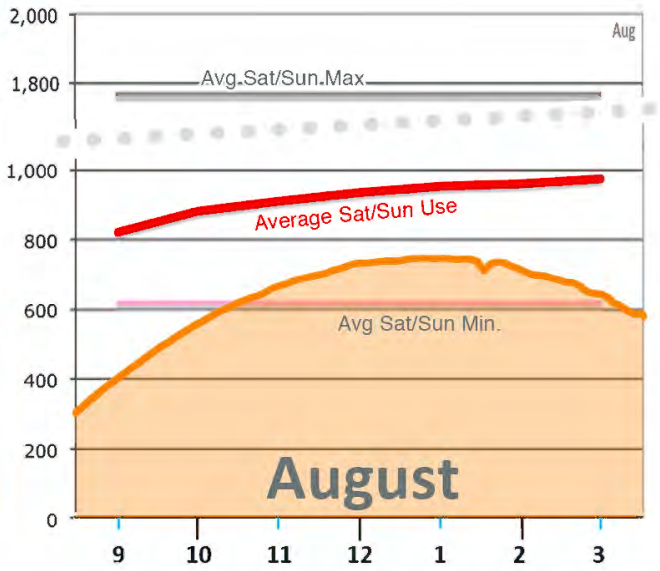


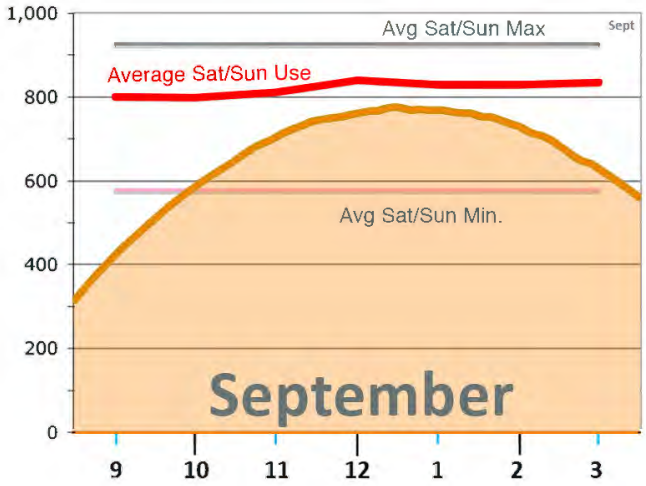
Estimated 960 kW Solar Production vs. Weekend LFMU Use Jan-June 2015

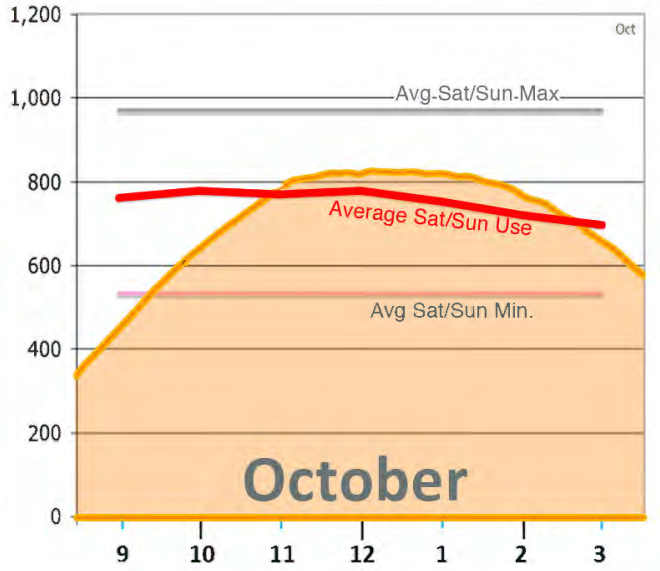


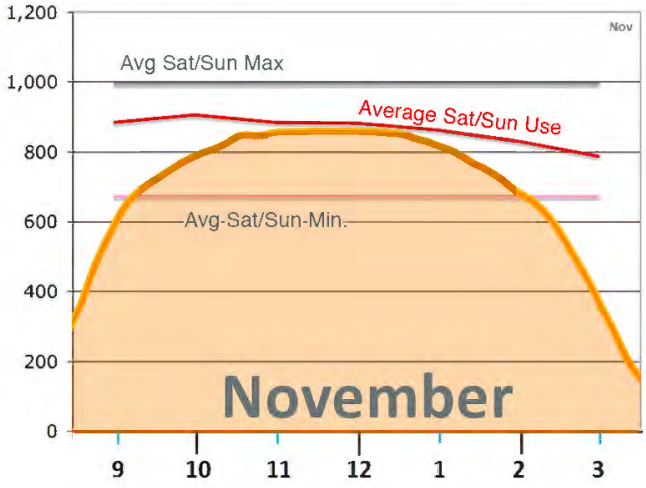
Estimated 960 kW Solar Production vs. Weekend LFMU Use July-Nov. 2015







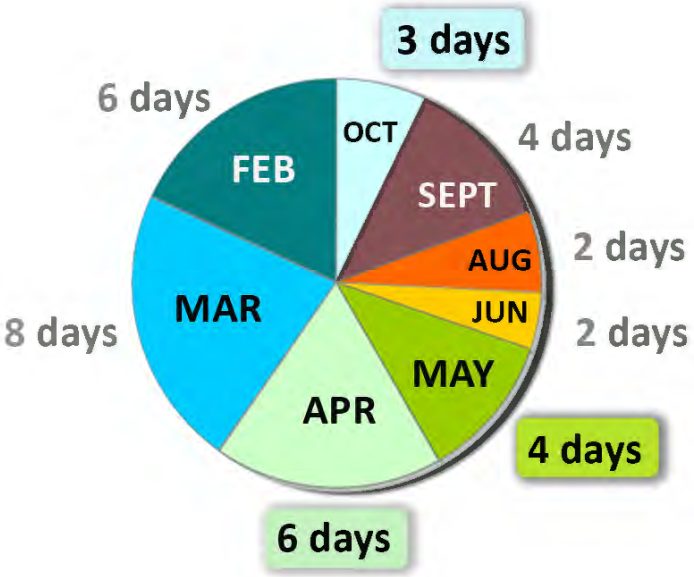


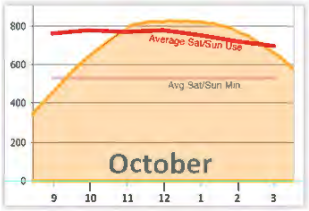


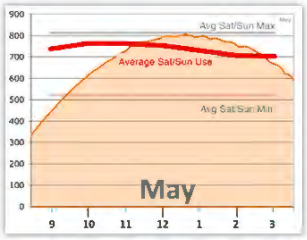
Chances of a 960kW Array Exceeding Realtime Power Use During the months of April, May and October

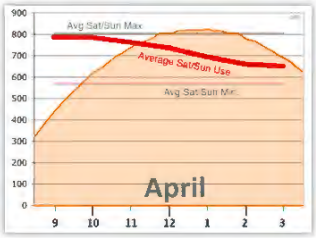
Through 1452 days of operation of the reference solar array, there were 139 days where production exceeded 90% of maximum ouput. How often would these circunstances coincide with weekend low energy use and how much solar energy would fail to be generated because of lacking demand within the LFMU footprint?

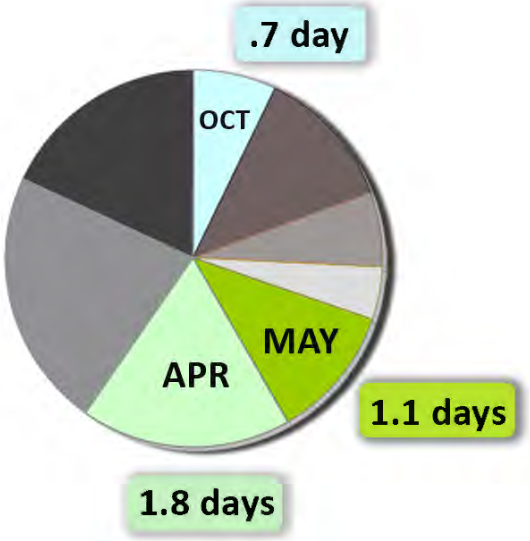
The number of days where generation loss is risked is reduced to 13 per year because solar generation potential is only exceeded in April, May and October.











The potential 1- 10% loss in solar generation would occur only weekends. Statistically, this could reduce generation from the 960 kW solar farm about 3.6 days per year or from .1 to .4%.

Calculating 100% Renewable Energy Offset For Organic Valley- 2014 Usage

			Cashton Wind Credit^	Cashton + Rugby^^
	2014 OV Annual Usage (kWh)	**1,847,542**		
	2014 Annual Usage at 87% Non Renewable^ (kWh)		**1,607,362**	
	2014 Annual Usage at 79% Non Renewable^^ (kWh)			**1,459,558**
800kW	OV Annual Solar kWh from **800 kW** of 960kW Solar Farm	1,040,130	1,040,130	1,040,130
	OV Percentage Renewable Energy Offset	**56%**	**65%**	**71%**
	Effect of 13 years of reducing energy -2.5% per year (kWh)	-400,000	-400,000	-400,000
	OV Solar Offset + Energy Efficency in 2029	**78%**	**90%**	**100%**
1,223 kW	OV Annual Solar kWh from **1,220 kW** of 1,400kW Solar Farm	1,459,770	1,459,770	1,459,770
	OV Percentage Renewable Energy Offset	**79%**	**91%**	**100%**
	Effect of 4 years of reducing energy -2.5% per year (kWh)	-147,592	-147,592	-147,592
	OV Solar Offset + Energy Efficency in 2020	**87%**	**100%**	**110%**
1,236 kW	OV Annual Solar kWh from **1,236 kW** of 1,400kW Solar Farm	1,609,530	1,609,530	1,609,530
	OV Percentage Renewable Energy Offset	**87%**	**100%**	**110%**
1.422 kW	OV Annual Solar kWh from **1,422 kW** of 1,600 kW Solar Farm	1,848,600	1,848,600	1,848,600
	OV Percentage Renewable Energy Offset	**100%**	**115%**	**127%**

^ Includes 13% Credit for Cashton Greens Power purchased by LFMU
^^ Includes 13% Credit for Cashton Greens Power and 9% for Rubgy, ND power purchased by LFMU

Adjusted August 2015 LFMU Energy Costs w/960 kW Solar Farm

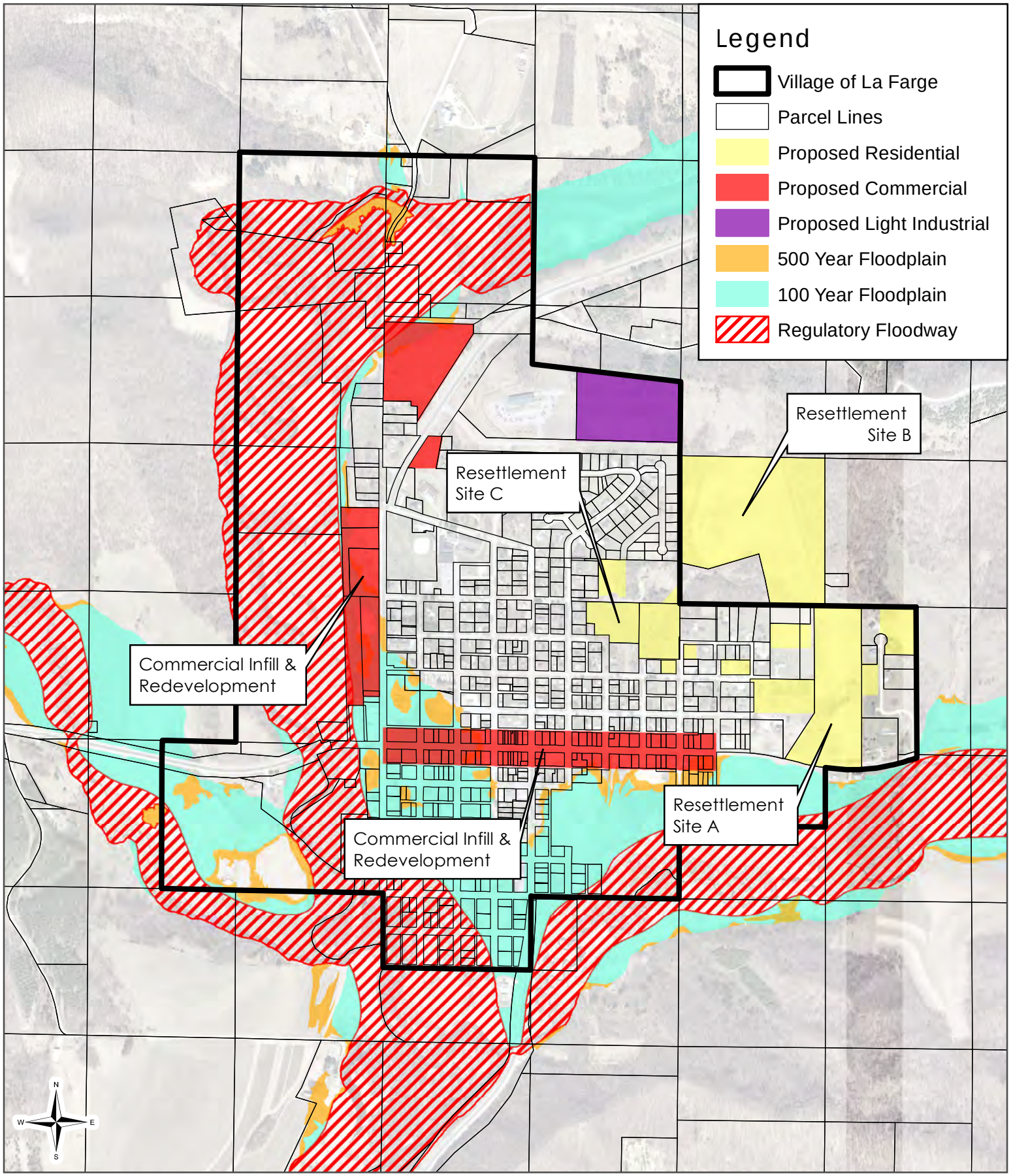
(solar power credited .90 usual rate)

La Farge Community Solar Large Power kW	860
La Farge Community Solar Residential & General kW	100
Total Solar Farm Size kW	960

Energy Supplier/ [redacted] Transmission Fee		kWh	Charge	eff rate / kWh
[redacted]	1 mo.	62,955	$749	$0.0119
[redacted] **Transmission Fee** (affected by lower [redacted] purchase)	1 mo.		$6,605	$0.0115
[redacted]	1 mo.	122,933	$5,719	$0.0465
LF Com Solar Lrg Power purchased at .9 retail	1 mo.	93,167	$5,165	$0.0554
LF Com Solar Residential purchased at .9 retail	1 mo.	10,833	$975	$0.0900
[redacted]	1 mo.	386,065	$20,380	$0.0528
Totals With Solar		**675,953**	**$39,594**	**$0.0586**
Totals BEFORE Solar		675,953	$40,152	$0.0594
Percent Change (does not include demand related savings)		0%	-1%	-1%
Energy Cost Savings	**$559**			
PCAC Rate		$0.0130		
Effective rate with PCAC w/ Solar		$0.0716		
Effective with PCAC before Solar		$0.0724		
Percent Change		-1%		

APPENDIX D: Resettlement Sites

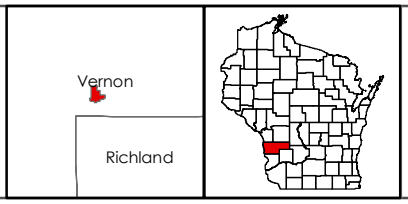
- Community-Wide Development Map
- Site A: Concept Plan
- Site A: Opinion of Probable Cost
- Site B: Concept Plan
- Site B: Opinion of Probable Cost
- Site C: Concept Plan
- Site C: Opinion of Probable Cost
- Commercial Infill Map



Community Development Map

Village of La Farge

0 0.1 0.2 0.4 Miles



vierbicher
planners engineers advisors

REEDSBURG - MADISON - PRAIRIE DU CHIEN - MILWAUKEE METRO
400 Viking Drive, Reedsburg, WI 53959
Phone: (608) 524-6468 Fax: (608) 524-8218

File Path: R:\LaFarge, Village of\200111 - 2020 Economic Recovery Plan\GIS\MXD\La Farge - Development Map.mxd

Data Sources:

N
W E
S

GRAPHIC SCALE FEET
0 75 150 300

SITE A

UPPER LIMIT OF WATER PRESSURE ZONE

ORGANIC WAY

HILLVIEW DR

LAKEVIEW DRIVE

LAKEVIEW DRIVE

N OAK DRIVE

POTENTIAL LIFT STATION TO SERVE NEW DEVELOPMENT

EXISTING LIFT STATION SERVING OAK STREET

SITE C

SITE B

NORTH STREET

UPPER LIMIT OF WATER PRESSURE ZONE

WATER RESERVOIR

POTENTIAL WATER BOOSTER STATION TO SERVE NEW DEVELOPMENT

N MAPLE STREET

SCHOOL STREET

PINE STREET

CHERRY STREET

HIGHLAND STREET

PENN STREET

FLOOD FRINGE

MAIN STREET

STH 82

BEAR CREEK

LEGEND

- MULTI-FAMILY (6.1 ACRES)
- SINGLE FAMILY (69 LOTS)
- LIGHT INDUSTRIAL / COMMERCIAL (12.5 ACRES)
- ROADWAY (6,160 FEET)
- GREEN SPACE
- STORM WATER FACILITIES
- SANITARY SEWER
- WATER MAIN
- STORM SEWER

DWG. NO.	
SHEET	1 OF 1
PROJECT NO.	200111
CHECKED	NPFA
DRAFTER	THAL
DATE	2020-10
SCALE	AS SHOWN

REVISIONS			REVISIONS		
NO.	DATE	REMARKS	NO.	DATE	REMARKS

CONCEPT MAP - RESETTLEMENT SITES A, B & C

ECONOMIC RECOVERY PLAN
VILLAGE OF LAFARGE
VERNON COUNTY, WISCONSIN

vierbicher
planners | engineers | advisors
Phone: (800) 261-3898

N
W E
S

GRAPHIC SCALE FEET
0 50 100 200

SITE A

UPPER LIMIT OF
WATER PRESSURE ZONE

ORGANIC WAY

LAKEVIEW DRIVE

HILLVIEW DR

LAKEVIEW DRIVE

N OAK DRIVE

POTENTIAL LIFT STATION TO
SERVE NEW DEVELOPMENT

EXISTING LIFT STATION
SERVING OAK STREET

SITE C

NORTH STREET

LS

LEGEND

- MULTI-FAMILY
- SINGLE FAMILY
- COMMERCIAL/INDUSTRIAL (12.5 ACRES)
- ROADWAY
- GREEN SPACE
- STORM WATER FACILITIES
- SANITARY SEWER
- WATER MAIN
- STORM SEWER

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Phone: (800) 261-3898

CONCEPT MAP - RESETTLEMENT SITE A

ECONOMIC RECOVERY PLAN
VILLAGE OF LAFARGE
VERNON COUNTY, WISCONSIN

REVISIONS			
NO.	DATE	REMARKS	

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SCALE
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2020-09

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PROJECT NO.
200111

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DWG. NO.

LaFarge Recovery Project

Opinion of Probable Cost
11/30/2020

Item Ref. No.	Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
Sanitary Sewer - Site A					
	Sanitary Sewer - 8" PVC	LF	2660	$ 37.00	$ 98,420.00
	Sanitary Sewer - PVC Service Lateral	LF	1620	$ 35.00	$ 56,700.00
	Sanitary Sewer Televising	LF	2660	$ 1.00	$ 2,660.00
	Sanitary Sewer - 48" Dia. Manhole	EA	10	$ 3,500.00	$ 35,000.00
	Potential Lift Station	LS	1	$ 275,000.00	$ 275,000.00
	Select Granular Backfill	CY	1580	$ 13.00	$ 20,540.00
	Mobilization, Bonds & Traffic Control	LS	1	$ 25,000.00	$ 25,000.00
				Subtotal - Sanitary Sewer Site A	$ 513,320.00
Sanitary Sewer - Site B					
	Sanitary Sewer - 8" PVC	LF	1935	$ 37.00	$ 71,595.00
	Sanitary Sewer - PVC Service Lateral	LF	800	$ 35.00	$ 28,000.00
	Sanitary Sewer Televising	LF	1935	$ 1.00	$ 1,935.00
	Sanitary Sewer - 48" Dia. Manhole	EA	10	$ 3,500.00	$ 35,000.00
	Select Granular Backfill	CY	1150	$ 13.00	$ 14,950.00
	Mobilization, Bonds & Traffic Control	LS	1	$ 8,000.00	$ 8,000.00
				Subtotal - Sanitary Sewer Site B	$ 159,480.00
Sanitary Sewer - North Street Extension					
	Sanitary Sewer - 8" PVC	LF	390	$ 37.00	$ 14,430.00
	Sanitary Sewer - PVC Service Lateral	LF	180	$ 35.00	$ 6,300.00
	Sanitary Sewer Televising	LF	390	$ 1.00	$ 390.00
	Sanitary Sewer - 48" Dia. Manhole	EA	1	$ 3,500.00	$ 3,500.00
	Select Granular Backfill	CY	230	$ 13.00	$ 2,990.00
	Mobilization, Bonds & Traffic Control	LS	1	$ 2,000.00	$ 2,000.00
				Subtotal - Sanitary Sewer Site North St Extension	$ 29,610.00
				Total Sanitary Sewer Construction	**$ 702,410.00**
				Contingency (10%) -	$ 70,241.00
				Professional Services -	$ 115,897.65
				Land Acqusition for Desginated ROW -	$ -
				Total Project Cost Sanitary Sewer Improvements	**$ 888,548.65**

SITE B

SCHOOL STREET

PINE STREET

HIGHLAND STREET

CHERRY STREET

PENN STREET

MAIN STREET

FLOOD FRINGE

UPPER LIMIT OF WATER PRESSURE ZONE

STH 82

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LEGEND

- MULTI-FAMILY
- SINGLE FAMILY
- COMMERCIAL/INDUSTRIAL
- ROADWAY
- GREEN SPACE
- STORM WATER FACILITIES
- SANITARY SEWER
- WATER MAIN
- STORM SEWER

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CONCEPT MAP - RESETTLEMENT SITE B

ECONOMIC RECOVERY PLAN
VILLAGE OF LAFARGE
VERNON COUNTY, WISCONSIN

REVISIONS

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PROJECT NO.
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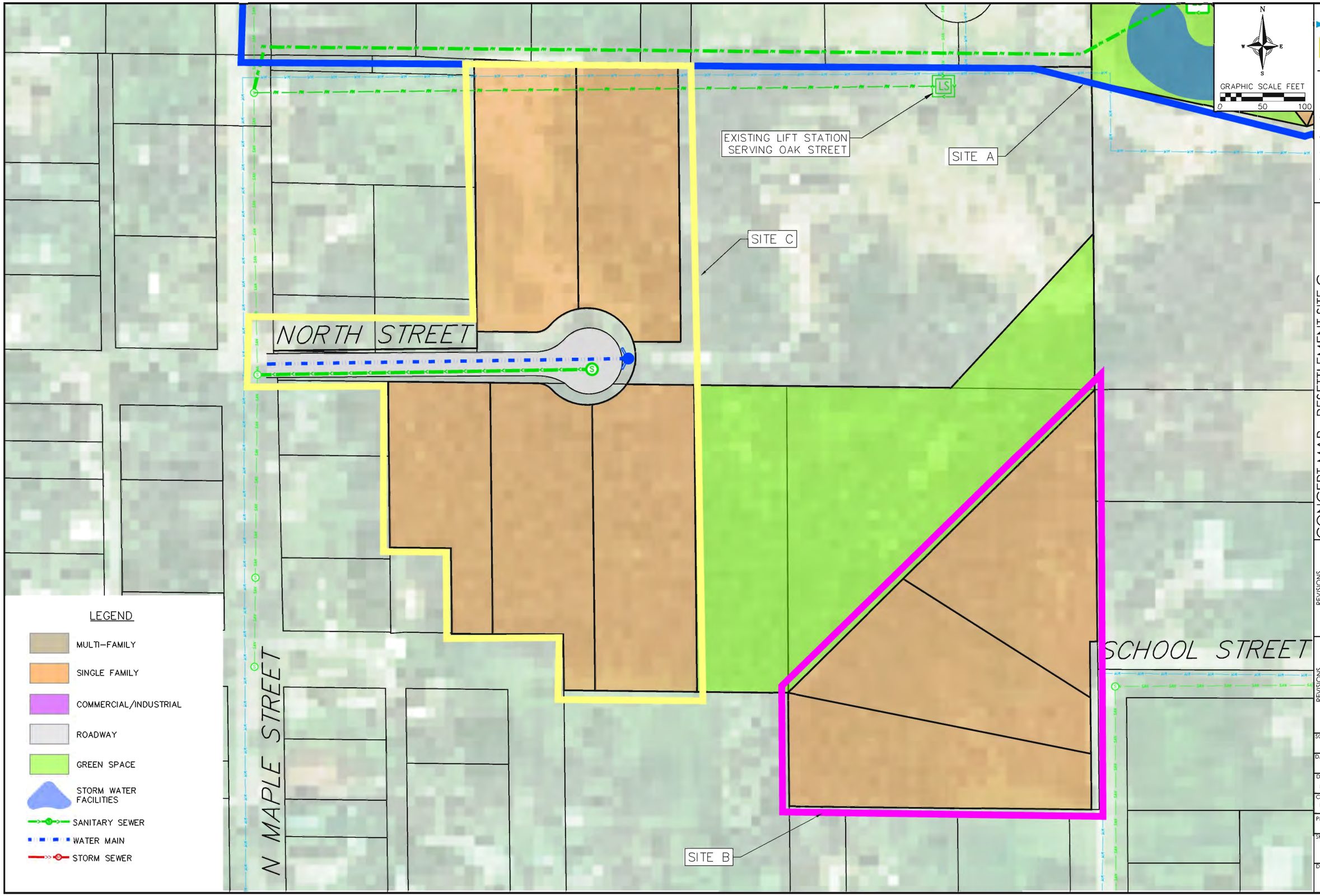
Item Ref. No.	Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
Water Distribution - Site A					
	Water Main - 6" D.I. Class 52	LF	550	$ 55.00	$ 30,250.00
	Water Main - 8" D.I. Class 52	LF	3030	$ 57.00	$ 172,710.00
	Water Main - 10" D.I. Class 52	LF	300	$ 65.00	$ 19,500.00
	Gate Valves - 6"	EA	6	$ 1,350.00	$ 8,100.00
	Gate Valves - 8"	EA	12	$ 1,800.00	$ 21,600.00
	Gate Valves - 10"	EA	2	$ 2,300.00	$ 4,600.00
	Hydrant	EA	6	$ 4,000.00	$ 24,000.00
	Water Service - Corporation & Curb Stop - 1" Copper	LF	1470	$ 50.00	$ 73,500.00
	Potential Pressure Booster Station	LS	1	$ 400,000.00	$ 400,000.00
	Select Granular Backfill	CY	1730	$ 13.00	$ 22,490.00
	Mobilization, Bonds & Traffic Control	LS	1	$ 40,000.00	$ 40,000.00
				Subtotal - Water Distribution Site A	$ 816,750.00
Water Distribution - Site B					
	Water Main - 6" D.I. Class 52	LF	280	$ 55.00	$ 15,400.00
	Water Main - 8" D.I. Class 52	LF	2600	$ 57.00	$ 148,200.00
	Gate Valves - 6"	EA	4	$ 1,350.00	$ 5,400.00
	Gate Valves - 8"	EA	8	$ 1,800.00	$ 14,400.00
	Hydrant	EA	4	$ 4,000.00	$ 16,000.00
	Water Service - Corporation & Curb Stop - 1" Copper	LF	770	$ 50.00	$ 38,500.00
	Select Granular Backfill	CY	1160	$ 13.00	$ 15,080.00
	Mobilization, Bonds & Traffic Control	LS	1	$ 14,000.00	$ 14,000.00
				Subtotal - Water Distribution Site B	$ 266,980.00
Water Distribution - North Street Extension					
	Water Main - 6" D.I. Class 52	LF	20	$ 55.00	$ 1,100.00
	Water Main - 8" D.I. Class 52	LF	430	$ 57.00	$ 24,510.00
	Gate Valves - 6"	EA	1	$ 1,350.00	$ 1,350.00
	Gate Valves - 8"	EA	1	$ 1,800.00	$ 1,800.00
	Hydrant	EA	1	$ 4,000.00	$ 4,000.00
	Water Service - Corporation & Curb Stop - 1" Copper	LF	180	$ 50.00	$ 9,000.00
	Select Granular Backfill	CY	190	$ 13.00	$ 2,470.00
	Mobilization, Bonds & Traffic Control	LS	1	$ 2,400.00	$ 2,400.00
				Subtotal - Water Distribution North St Extension	$ 46,630.00
				Total Water Distribution Construction	**$ 1,130,360.00**
				Contingency (10%) -	$ 113,036.00
				Professional Services -	$ 186,509.40
				Land Acqusition for Desginated ROW -	$ -
				Total Project Cost Water Distribution Improvements	**$ 1,429,905.40**



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CONCEPT MAP - RESETTLEMENT SITE C

ECONOMIC RECOVERY PLAN
VILLAGE OF LAFARGE
VERNON COUNTY, WISCONSIN

REVISIONS			
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Item Ref. No.	Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
Street Construction - Site A (24' Paved with Ditches)					
	Strip & Stockpile Topsoil (1' +/- Average Thickness)	CY	9900	$ 2.00	$ 19,800.00
	Silt Fence	LF	5340	$ 1.60	$ 8,544.00
	Stone Weeper	TON	100	$ 40.00	$ 4,000.00
	Common Excavation	CY	9900	$ 5.00	$ 49,500.00
	Borrow Excavation	CY	420	$ 9.00	$ 3,780.00
	Clearing & Grubbing	LS	1	$ 5,000.00	$ 5,000.00
	Topsoil Respread (6" Thick)	SY	19800	$ 0.50	$ 9,900.00
	Erosion Mat DOT Class I, Type A w/ Seed & Fertilizer	SY	19800	$ 3.00	$ 59,400.00
	Base Aggregate Dense - Street - 1 1/4" (6" Thick)	TON	4330	$ 11.00	$ 47,630.00
	Base Aggregate Dense - Street - 3" (12" Thick)	TON	8660	$ 11.00	$ 95,260.00
	Finish Grading In Prep. Of Paving	LF	3560	$ 5.00	$ 17,800.00
	HMA Pavement - Upper Layer (2"), 4 LT 58-28 S	TON	1100	$ 92.00	$ 101,200.00
	HMA Pavement - Lower Layer (2"), 4 LT 58-28 S	TON	1100	$ 88.00	$ 96,800.00
	Asphaltic Tack Coat	SY	9500	$ 0.15	$ 1,425.00
	Street Signs	LS	1	$ 3,500.00	$ 3,500.00
	Clear Stone Tracking Pad	TON	200	$ 15.00	$ 3,000.00
	Concrete Curb & Gutter - 24"	LF	0	$ 13.00	$ -
	Mobilization, Bonds & Traffic Control	LS	1	$ 28,000.00	$ 28,000.00
				Subtotal - Street Construction Site A	$ 554,539.00
Street Construction - Site B (24' Paved with Ditches)					
	Strip & Stockpile Topsoil (1' +/- Average Thickness)	CY	8200	$ 2.00	$ 16,400.00
	Silt Fence	LF	4425	$ 1.60	$ 7,080.00
	Stone Weeper	TON	100	$ 40.00	$ 4,000.00
	Common Excavation	CY	8200	$ 5.00	$ 41,000.00
	Borrow Excavation	CY	350	$ 9.00	$ 3,150.00
	Clearing & Grubbing	LS	1	$ 10,000.00	$ 10,000.00
	Topsoil Respread (6" Thick)	SY	16400	$ 0.50	$ 8,200.00
	Erosion Mat DOT Class I, Type A w/ Seed & Fertilizer	SY	16400	$ 3.00	$ 49,200.00
	Base Aggregate Dense - Street - 1 1/4" (6" Thick)	TON	3600	$ 11.00	$ 39,600.00
	Base Aggregate Dense - Street - 3" (12" Thick)	TON	7200	$ 11.00	$ 79,200.00
	Finish Grading In Prep. Of Paving	LF	2950	$ 5.00	$ 14,750.00
	HMA Pavement - Upper Layer (2"), 4 LT 58-28 S	TON	910	$ 92.00	$ 83,720.00
	HMA Pavement - Lower Layer (2"), 4 LT 58-28 S	TON	910	$ 88.00	$ 80,080.00
	Asphaltic Tack Coat	SY	7900	$ 0.15	$ 1,185.00
	Street Signs	LS	1	$ 3,500.00	$ 3,500.00
	Clear Stone Tracking Pad	TON	200	$ 15.00	$ 3,000.00
	Concrete Curb & Gutter - 24"	LF	0	$ 13.00	$ -
	Mobilization, Bonds & Traffic Control	LS	1	$ 23,500.00	$ 23,500.00
				Subtotal - Street Construction Site B	$ 467,565.00

Item Ref. No.	Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
Street Construction - North Street Extension (24' Paved with Ditches)					
	Strip & Stockpile Topsoil (1' +/- Average Thickness)	CY	1200	$ 2.00	$ 2,400.00
	Silt Fence	LF	660	$ 1.60	$ 1,056.00
	Stone Weeper	TON	20	$ 40.00	$ 800.00
	Common Excavation	CY	1200	$ 5.00	$ 6,000.00
	Borrow Excavation	CY	50	$ 9.00	$ 450.00
	Clearing & Grubbing	LS	1	$ 5,000.00	$ 5,000.00
	Topsoil Respread (6" Thick)	SY	2400	$ 0.50	$ 1,200.00
	Erosion Mat DOT Class I, Type A w/ Seed & Fertilizer	SY	2400	$ 3.00	$ 7,200.00
	Base Aggregate Dense - Street - 1 1/4" (6" Thick)	TON	540	$ 11.00	$ 5,940.00
	Base Aggregate Dense - Street - 3" (12" Thick)	TON	1080	$ 11.00	$ 11,880.00
	Finish Grading In Prep. Of Paving	LF	440	$ 5.00	$ 2,200.00
	HMA Pavement - Upper Layer (2"), 4 LT 58-28 S	TON	140	$ 92.00	$ 12,880.00
	HMA Pavement - Lower Layer (2"), 4 LT 58-28 S	TON	140	$ 88.00	$ 12,320.00
	Asphaltic Tack Coat	SY	1200	$ 0.15	$ 180.00
	Street Signs	LS	1	$ 500.00	$ 500.00
	Clear Stone Tracking Pad	TON	50	$ 15.00	$ 750.00
	Concrete Curb & Gutter - 24"	LF	0	$ 13.00	$ -
	Mobilization, Bonds & Traffic Control	LS	1	$ 5,000.00	$ 5,000.00
				Subtotal - Street Construction North St Extension	$ 75,756.00
				Total Street Construction	**$ 1,097,860.00**
				Contingency (10%) -	$ 109,786.00
				Professional Services -	$ 181,146.90
				Land Acqusition for Desginated ROW -	$ -
				Total Project Cost Street Improvements	**$ 1,388,792.90**

Storm Sewer & Storm Water Management - Site A					
	Street Culvert Crossing	LF	300	$ 100.00	$ 30,000.00
	Street Culvert Endwall w/ Trash Rack	EA	10	$ 2,400.00	$ 24,000.00
	Storm Water Management Basin	LS	1	$ 65,000.00	$ 65,000.00
	Mobilization, Bonds & Traffic Control	LS	1	$ 7,000.00	$ 7,000.00
				Subtotal - Storm Sewer & Storm Water Management Site B	$ 126,000.00
Storm Sewer & Storm Water Management - Site A					
	Street Culvert Crossing	LF	180	$ 100.00	$ 18,000.00
	Street Culvert Endwall w/ Trash Rack	EA	6	$ 2,400.00	$ 14,400.00
	Storm Water Management Basin	LS	1	$ 35,000.00	$ 35,000.00
	Mobilization, Bonds & Traffic Control	LS	1	$ 4,000.00	$ 4,000.00
				Subtotal - Storm Sewer & Storm Water Management Site B	$ 71,400.00
				Total Storm Water Construction	**$ 197,400.00**
				Contingency (10%) -	$ 19,740.00
				Professional Services -	$ 32,571.00
				Land Acqusition for Desginated ROW -	$ -
				Total Project Cost Street Improvements	**$ 249,711.00**

Total Project Construction	**$**	**3,128,030.00**
Contingency (10%) -	$	312,803.00
Professional Services -	$	516,124.95
Land Acqusition for Desginated ROW -	$	-
Total Project Cost Site B -	**$**	**3,956,957.95**

Implementation

La Farge, WI

- **A** — Rehab/Reuse of Nuzum Building Supply
- **B** — Relocation of Business
- **C** — Potential Infill Development
- **D** — Potential Redevelopment
- **E** — Stronger pedestrian connection from canoe landing to downtown. Continue streetlights and streetscape features
- **F** — Safety Improvements & Features to slow traffic
- Enhanced pedestrian safety
- Traffic calming gateway features
- Commercial Corridors

0 125 250 500 Feet

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REEDSBURG - MADISON - PRAIRIE DU CHIEN - MILWAUKEE METRO
400 Viking Drive, Reedsburg, WI 53959
Phone: (608) 524-6468 Fax: (608) 524-8218

Data Sources: FEMA, Vernon County, Vierbicher

File Path: R:\LaFarge, Village of\190354 - Main Street Reconstruction\Planning & Zoning\Maps & Renderings\MXDs\Plan Maps

APPENDIX E: Flood Mitigation Infrastructure

- Levee Concept Map
- 500-Year Accredited Levee Plan & Profile
- 100-Year Accredited Levee Plan & Profile
- 100-Year Non-Accredited Levee Plan
- Opinions of Probable Cost
- Power House & Substation Flood Protection Plan
- Power House & Substation Flood Protection Opinion of Probable Cost

EARTHEN LEVEE SECTION
1,585 LF

PROPOSED SUBSTATION LOCATION

BUILDABLE LOT
APPROX 5.24 ACRES
LEVEL WITH TOP OF
PROPOSED LEVEE

CONCRETE LEVEE SECTION
20 LF

W MAIN ST / HWY 82 CROSSING
TEMPORARY FLOOD BARRIER
65 LF

EARTHEN LEVEE SECTION
1,130 LF

CONCRETE LEVEE SECTION
600 LF

ELEVATED ROAD CROSSING

ALTERNATE EARTHEN LEVEE SECTION
1,880 LF

LEGEND

- REGULATORY FLOODWAY
- 1% ANNUAL CHANCE FLOOD HAZARD (100 YR)
- 0.2% ANNUAL CHANCE FLOOD HAZARD (500 YR)
- PARCEL LINES
- EARTHEN LEVEE SECTION (APPROX TOTAL = 2,715 LF)
- ALTERNATE EARTHEN LEVEE SECTION (APPROX TOTAL = 3,465 LF)
- CONCRETE LEVEE SECTION (APPROX TOTAL = 620 LF)
- TEMPORARY FLOOD BARRIER
- BUILDABLE LOT
- STREAMLINE

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CONCEPT MAP

ECONOMIC RECOVERY PLAN
VILLAGE OF LAFARGE
VERNON COUNTY, WISCONSIN

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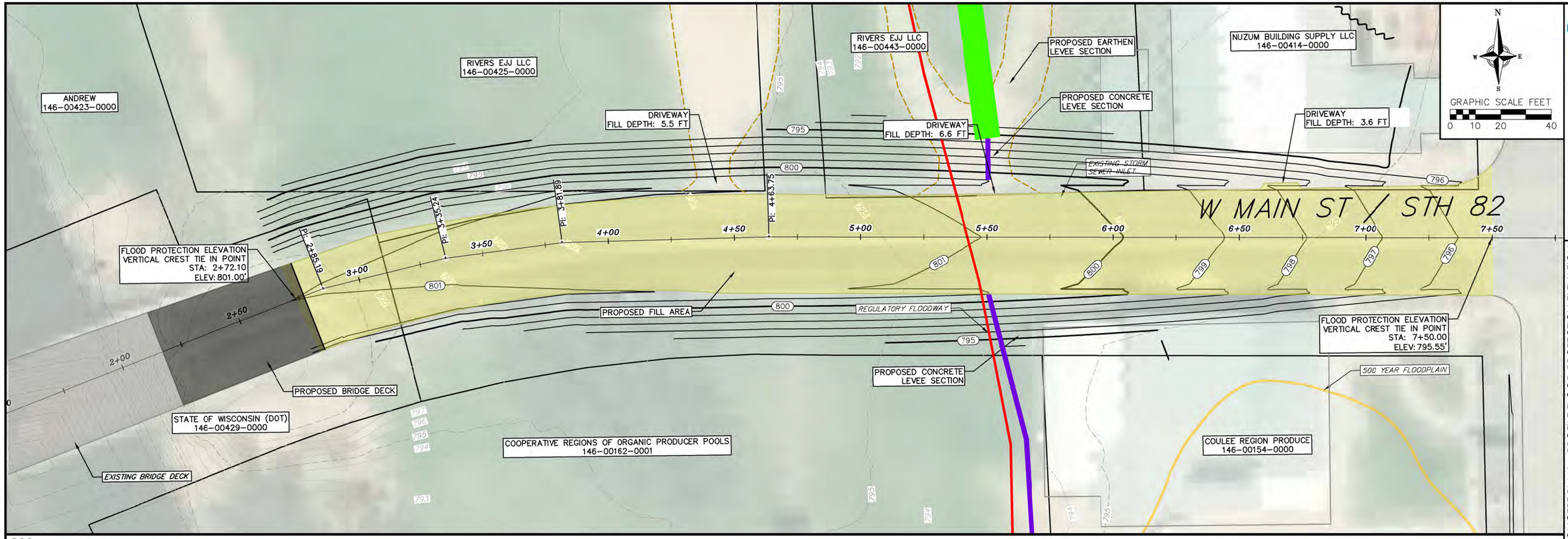

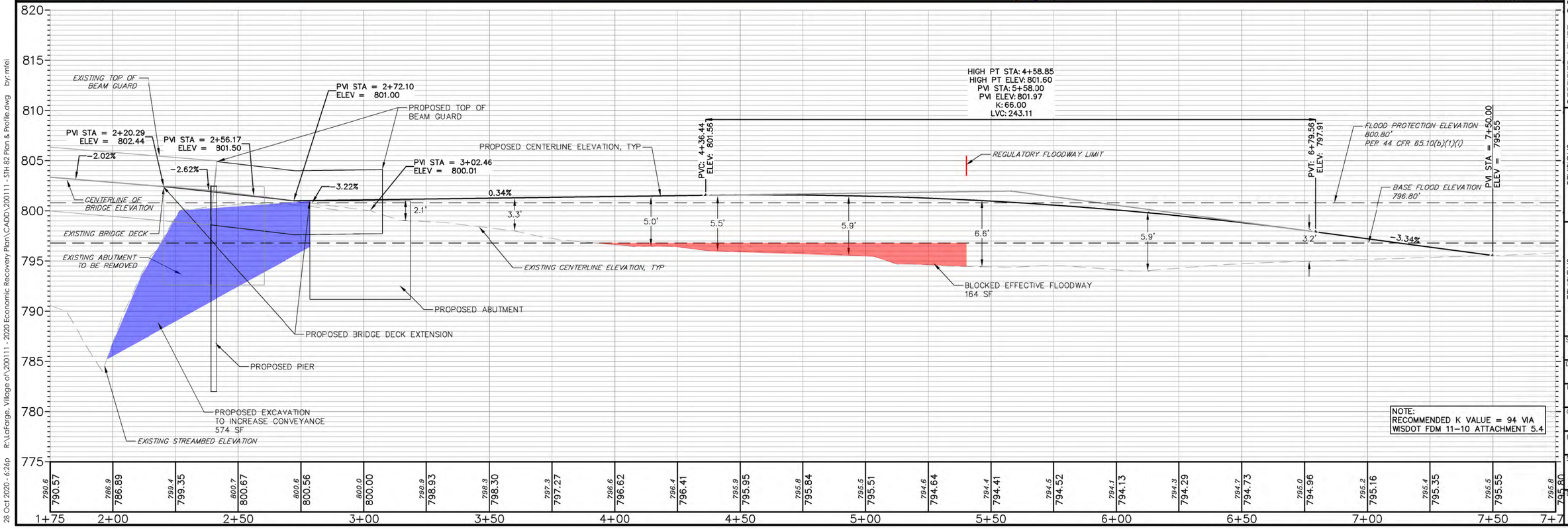

NOTE:
RECOMMENDED K VALUE = 94 VIA
WISDOT FDM 11-10 ATTACHMENT 5.4

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CERTIFIED LEVEE - CONCEPT PLAN & PROFILE FLOOD PROTECTION ELEVATION
ECONOMIC RECOVERY PLAN
VILLAGE OF LA FARGE
VERNON COUNTY, WISCONSIN

REVISIONS NO.	DATE	REMARKS

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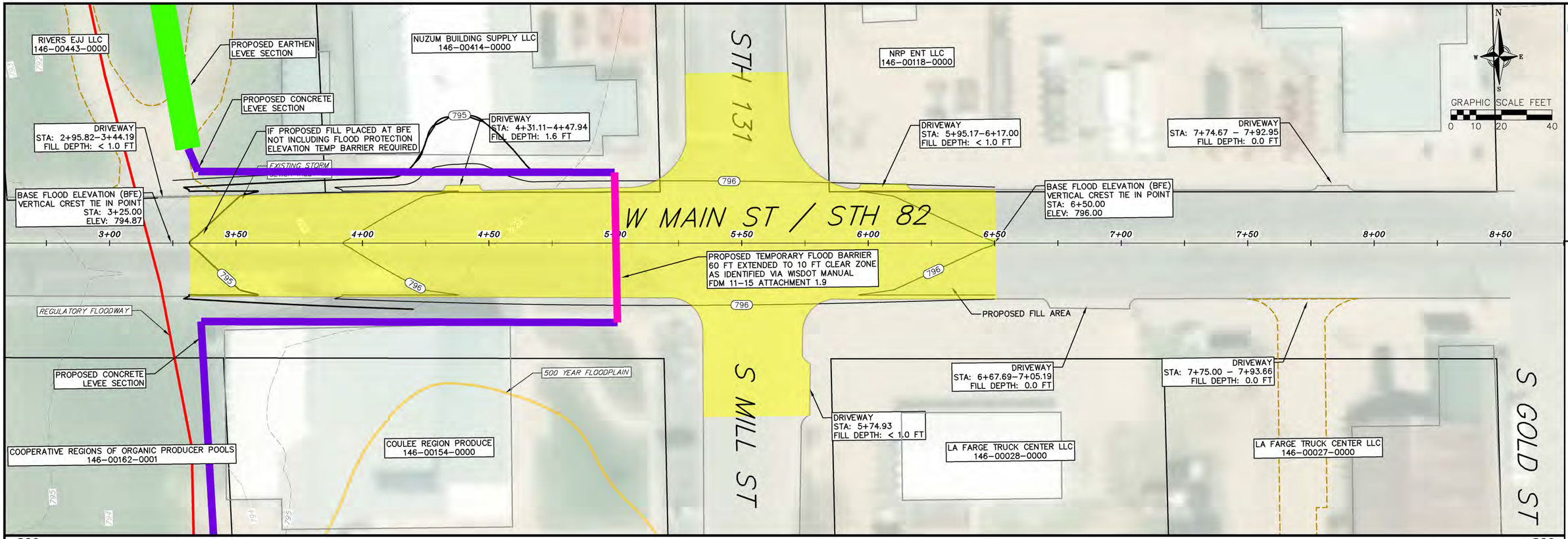
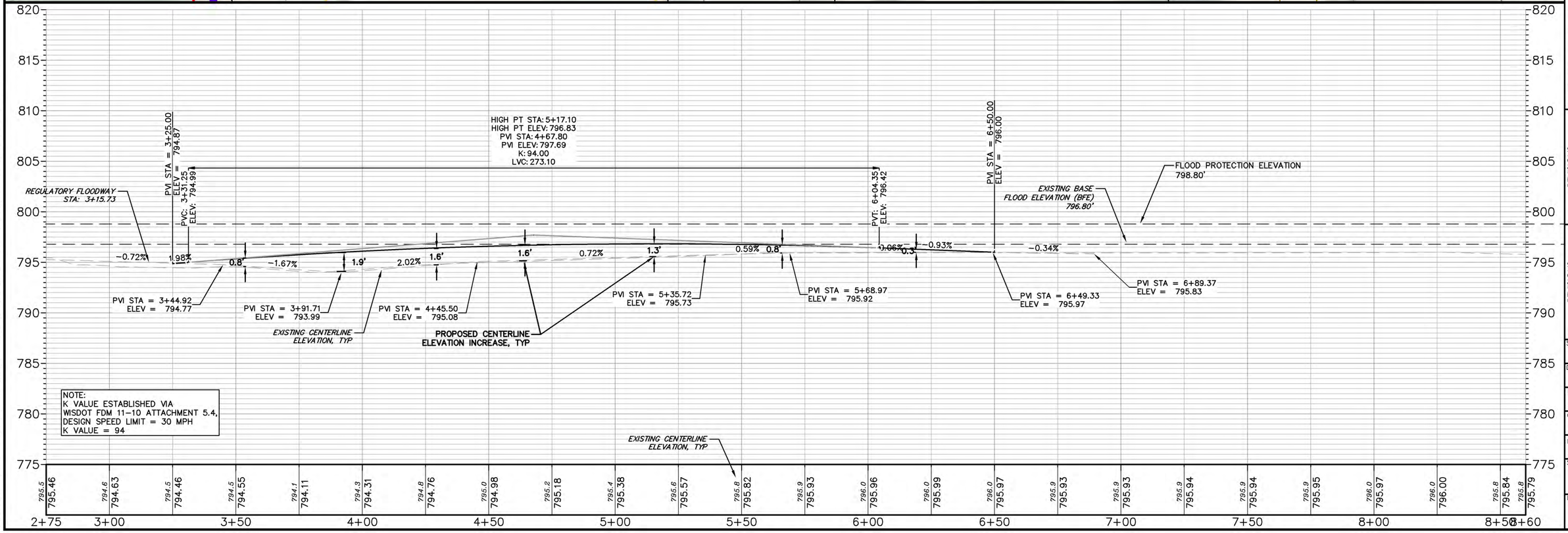
28 Oct 2020 - 6:26p R:\LaFarge, Village of\200111 - 2020 Economic Recovery Plan\CADD\200111 - STH 82 Plan & Profile.dwg by: mfei

Section 00 41 43
Preliminary Opinion of Probable Cost
21-Dec-20

Bid Item Ref. No.	Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
Alternative 1 - 500 Year Certified					
1	Earthen Levee	LF	2710	$ 180.00	$ 487,800.00
2	Concrete Levee	LF	645	$ 1,400.00	$ 903,000.00
3	Storm Water Pumping Station	EA	3	$ 80,000.00	$ 240,000.00
4	Street Reconstruction	LF	480	$ 650.00	$ 312,000.00
5	Bridge Extension	LF	60	$ 10,000.00	$ 600,000.00
				Subtotal:	$ 2,542,800.00
				Contingency (10%):	$ 254,280.00
				Engineering (15%):	$ 419,562.00
				Alternative 1 - 500 Year Certified - Total:	$3,216,642.00

Unit Prices have been computed in accordance with paragraph 11.03.B of the General Conditions.





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ALTERNATIVE 2: LEVEE CONCEPT PLAN & PROFILE
ECONOMIC RECOVERY PLAN
VILLAGE OF LA FARGE
VERNON COUNTY, WISCONSIN

REVISIONS			
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PROJECT NO.
200111

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1 OF 1

DWG. NO.

Section 00 41 43
Preliminary Opinion of Probable Cost
21-Dec-20

Bid Item Ref. No.	Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
Alternative 2 - 100 Year Certified					
1	Earthen Levee	LF	2710	$ 150.00	$ 406,500.00
2	Concrete Levee	LF	955	$ 1,100.00	$ 1,050,500.00
3	Temporary Flood Barrier	LF	60	$ 150.00	$ 9,000.00
4	Storm Water Pumping Station	EA	3	$ 80,000.00	$ 240,000.00
5	Street Reconstruction	LF	325	$ 650.00	$ 211,250.00
				Subtotal:	$ 1,917,250.00
				Contingency (10%):	$ 191,725.00
				Engineering (15%):	$ 316,346.25
				Alternative 2 - 100 Year Certified - Total:	$2,425,321.25

Unit Prices have been computed in accordance with paragraph 11.03.B of the General Conditions.

RIVERS EJJ LLC
146-00443-0000

PROPOSED EARTHEN LEVEE SECTION

PROPOSED CONCRETE LEVEE SECTION

EXISTING STORM SEWER INLET

NUZUM BUILDING SUPPLY LLC
146-00414-0000

STH 131

NRP ENT LLC
146-00118-0000

W MAIN ST / STH 82

REGULATORY FLOODWAY

PROPOSED CONCRETE LEVEE SECTION

500 YEAR FLOODPLAIN

COULEE REGION PRODUCE
146-00154-0000

S MILL ST

LA FARGE TRUCK CENTER LLC
146-00028-0000

LA FARGE TRUCK CENTER LLC
146-00027-0000

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ALTERNATIVE 3
ECONOMIC RECOVERY PLAN
VILLAGE OF LA FARGE
VERNON COUNTY, WISCONSIN

REVISIONS			
NO.	DATE	REMARKS	

REVISIONS			
NO.	DATE	REMARKS	

SCALE: AS SHOWN
DATE: DECEMBER 2020
DRAFTER: MFEI
CHECKED: NPFA
PROJECT NO.: 200111
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Section 00 41 43
Preliminary Opinion of Probable Cost
21-Dec-20

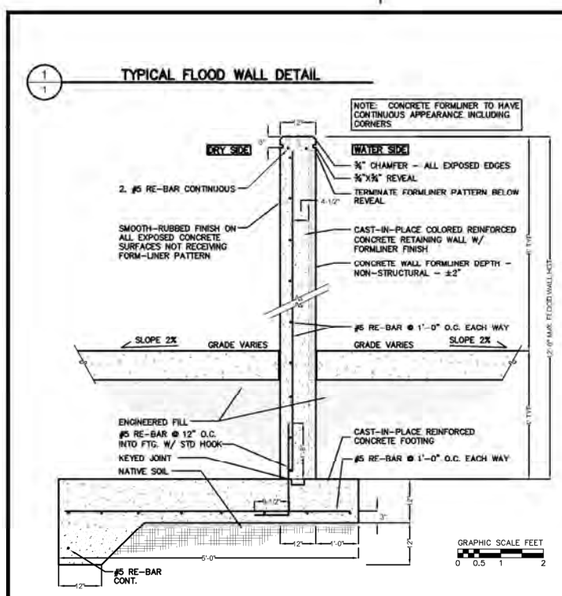
Bid Item Ref. No.	Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
Alternative 3 - 100 Year Non-Certified					
1	Earthen Levee	LF	2710	$ 150.00	$ 406,500.00
2	Concrete Levee	LF	630	$ 1,100.00	$ 693,000.00
3	Temporary Flood Barrier	LF	60	$ 150.00	$ 9,000.00
4	Storm Water Pumping Station	EA	3	$ 80,000.00	$ 240,000.00
				Subtotal:	$ 1,348,500.00
				Contingency (10%):	$ 134,850.00
				Engineering (15%):	$ 222,502.50
				Alternative 3 - 100 Year Non-Certified - Total:	$1,705,852.50

Unit Prices have been computed in accordance with paragraph 11.03.B of the General Conditions.

CONCRETE FLOOD WALL EXAMPLE

FLOOD GATE EXAMPLE

1/-1 TYPICAL FLOOD WALL DETAIL



LEGEND

- EXISTING CHIMNEY
- EXISTING FIRE HYDRANT
- EXISTING UTILITY POLE
- EXISTING ELECTRIC METER
- EXISTING GRAVEL
- PROPOSED FLOOD WALL
- PROPOSED FLOOD GATE
- PROPOSED CHAIN LINK GATE
- PROPOSED STORMWATER PIPE
- PROPOSED CONCRETE

N

GRAPHIC SCALE FEET
0 3.75 7.5 15

16' ACCESS OPENING WITH CHAIN LINK SECURITY GATE AND REMOVABLE FLOOD GATE

88.8'

P/L

10.0'

10' OVERHEAD DOORS

SERVICE DOOR

REMOVE WEST END OF EXISTING BUILDING

VILLAGE OF LA FARGE
146-00313-0000

ELECTRICAL POWERHOUSE

EM

12.0'

6.0'

92.9'

EXISTING SUBSTATION

P/L

10.0'

16' ACCESS OPENING WITH CHAIN LINK SECURITY GATE AND REMOVABLE FLOOD GATE

PROPOSED INTERNAL STORMWATER PUMPING STATION

P/L

PROPOSED STORMWATER DISCHARGE PIPE

12' TOTAL CONCRETE FLOOD WALL HEIGHT (WITH FOOTER)
8' CONCRETE LEVEE ABOVE GROUND
4' CONCRETE LEVEE BELOW GROUND

S SILVER ST

SITE PLAN

vierbicher
planners | engineers | advisors
Phone: (800) 261.3898

CONCEPTUAL POWER HOUSE & SUBSTATION FLOOD PROTECTION
ECONOMIC RECOVERY PLAN
VILLAGE OF LA FARGE
VERNON COUNTY, WISCONSIN

REVISIONS NO.	DATE	REMARKS

REVISIONS NO.	DATE	REMARKS

DATE 2020-12-09
DRAFTER MFEI
CHECKED NPFA
PROJECT NO. 200111
SHEET 1 OF 1

09 Dec 2020 - 8:03a R:\LaFarge_Village of\200111 - 2020 Economic Recovery Plan\CADD\200111-Substation Levee.dwg by: mfei

Conceptual Power House & Substation Flood Protection
Section 00 41 43
Preliminary Opinion of Probable Cost
12/9/2020

Bid Item Ref. No.	Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
General - 8' Tall Flood Wall					
1	Performance & Payment Bonds	LS	1	$ 10,000.00	$ 10,000.00
2	Mobilization	LS	1	$ 5,000.00	$ 5,000.00
3	Remove & Reconstruct West End of Existing Building	LS	1	$ 20,000.00	$ 20,000.00
4	Free Standing Reinf Conc Wall & Footing Including Form Liner 1 Side	LF	335	$ 950.00	$ 318,250.00
5	Flood Shields and Frames - Type B (16' Wide X 8' High)	EA	2	$ 15,000.00	$ 30,000.00
6	Internal Storwmater Pumping Station (Complete)	EA	1	$ 30,000.00	$ 30,000.00
				Subtotal - General - 8' Tall Flood Wall	$ 413,250.00
				Contingency (15%)	$ 61,987.50
				Engineering (15%)	$ 71,285.63
				Total - Conceptual Power House & Substation Flood Protection	$546,523.13