DATE OF REPORT: June 25, 1999

DATE OF NEXT STATUS REPORT: November 30, 1999

DATE OF WORKPROGRAM APPROVAL:

PROJECT COMPLETION DATE: June, 2001

LCMR WORK PROGRAM 1997

I. PROJECT TITLE: Pickwick Mill

Project Manager: Virginia Laken
Affiliation: Vice President, Pickwick Mill, Inc.
Mailing Address: Rt 6 Box 31 B
Winona MN 55987
Telephone Number: 507-454-8347 E-Mail: Klaken@aol.com
Fax: 507-454-8375

Total Biennial Project Budget:

$LCMR: $150,000

-$ LCMR Amount Spent $5555.76 5/98 update
-$LCMR Amount Spent $32,621.73 11/98 update
-$LCMR Amount Spent $50,593.19 6/99 update

Total LCMR Amount Spent to date: $88,770.68

+$LCMR Balance $61,229.32

A. Legal Citation: ML 1997 (Chap.246), Sec.(32.

Appropriation Language: Laws 1996, chapter 463, section 22, subdivision 8, is amended to read: For a grant for renovation of the historic Pickwick Mill. This appropriation is from the Minnesota future resources funds and is available until June 30,1999.

II. Project Summary and Results:

The project we are requesting funds for involves and includes an ongoing effort to restore Pickwick Mill into a Milling Interpretative Center. Completed work to date has resulted in the stabilization of the Mill, in that all floors, beams, and pillars have been replaced as needed and the roof has been replaced and restored. The Mill Pond has been restored including an updated spillway and replaced flood gates. In essence the Mill is now structurally sound and free from all major further deterioration. In addition we have repaired the existing wheel house and constructed a 20 ft. water wheel which is turning.

In order to continue restoration, our attentions are now focused on providing the public an opportunity to see the Mill operational (or at least semi-operational), to the point where individuals will be able to appreciate the milling processes and advances that the Pickwick Mill provides. Namely we are focusing our attention on the process of the water wheel and mill stone period.

Current funding will help us acquire mill stones, continue internal repair of the building (especially the ground floor), and establish necessary "tie ins" to the water wheel, gears, and shafts, to operate the mill stones. At the completion of the part of the project a major portion of the stone grinding process of milling will be established and operational. In other words we will be able to demonstrate milling using the water wheel for power generation and the millstones for the processing. In addition a working flow diagram of the roller milling process will be prepared to help in the next stage of restoration, which is roller milling.

III. PROGRESS SUMMARY:

May 20, 1998

Drawings have been prepared and delivered to Pickwick Mill engineers for work progress. A pair of Mill Stones have been obtained and are being redressed. There has been a delay in the time frame of the project due to ill health of the wife of the Milling Consultant who was preparing our drawings.

May 20 - January 2, 1999

Three millstones have been removed from their original site and delivered to a millwright for redressing. After completion of redressing the millstones were shipped to Pickwick Mill. Additional drawings are in the process of being made but have not been delivered as yet. These drawings are for the process of making the furniture for the millstones. The work has begun for the connecting of the millstones with the water wheel (the great spur gear) i.e. bearings and milling. The milling consultant made a site visit in August to answer questions and asses work in progress. This was very useful in that it was determined more assistance is needed from millwright. The machinist and contractor made a visit to Missouri to look at three mills in various stages of operation to gain a better understanding of the workings of the mill and in particular the millstones and the stone furnishings. In addition the machinist and contractor began to develop the specifics of the mill furniture and the great spur wheel. Work has also begun on the restoration of the Hurst Frame. The basement floor of the Mill has been excavated, drain tiles have been placed and gravel has been brought in. This work is to aide in keeping the floor dry and to allow access by tourists to this area.

January 2, 1999 – June 24, 1999

A great deal of progress has been accomplished on the mill during the spring. The basement floor of the mill has been completed in that all the gravel has been placed and for the first time in 20 years the ground floor of the mill is dry. This improvement allows access to visitors to view the large belts, drives and pulleys on this floor without danger of falling.

Work on the second floor of the mill consisted of completely rebuilding the Hurst Frame. Most of the original wood was found to be unusable and had to be replaced, which required major work to fit beams into very difficult to reach areas. In addition a 15 foot gear was built to accommodate the turning the millstones.

The gear was completely hand built with over two hundred separate pieces and 85 hand hewed gears. The gear is installed at the top of the Hurst Frame (or the ceiling of the second floor) and is truly a work of art.

The millstones are also now in place along with the corresponding stone furniture. The furniture is a sold old cabinet type of structure that surrounds the mill stones and keeps the wheat and flour contained. The oak furnishings stands approximately four feet high and of course is also completely hand made.

With the placement of the mill stones and the completion of the Hurst Frame and stone furniture the mill stones are now able to turn. The Board of Pickwick Mill held an annual meeting in May which was attended by over 80 members who not only participated in the annual meeting but also watched the mill stones turning for the first time in over 125 years. The sound and vibrations through the mill caused people to stand in awe at the accomplishment and to "feel" the mill come alive after so many years of silence. Work now consists of gear shaft and pulley restoration, elevator placement and repair, and machine repair and restoration.

IV. OUTLINE OF PROJECT RESULTS;

A. Consolidate the basement floor and drainage. Remove current sediment, detect and repair water seepage situation, repair belts, pulleys and shaft necessary for initial stage of milling operation.

Estimated Completion Date: August 1998 Project Completed June 1999

Estimated cost	**$ 7,000**
Material and Labor basement clean out, install drain and gravel	4,266
Supplies and shipping	621

Total Project Costs	$4887.00
Balance	***$ 2113***

B. Get power drive from the water wheel to the millstones and roller plant. There is no point in doing one without the other (concentrating on stones versus rollers) because the millstone drive is an extension of the roller plant drive.

Estimated Completion Date: December, 1998

1. Lineshaft drive from waterwheel to millstones and roller plant

Estimated cost	**$ 12,000**
Actual Costs:	
Started machining for lineshaft	802.70
Bearings	390.50
Bearings	3,135.94
Tooling	173.11
Greasing Materials	18.37
Machining	886.33
Bearings	370.54
Shafts and Couplings	971.97
Move Shaft and Gear	160.00
Bearing Clutch for main drive	2511.12
Machning	311.22
Total Project Cost to date	11,618.15
Balance	***$ 381.85***

2. Pulleys and gears for lineshaft

Estimated cost	**$ 5,000**
Material for Gear	14.19
Total Project Cost to date	14.19
Balance	***$ 4,985.81***

3. Repair all line shafts on Floor Two

Estimated cost	**$ 10,000**
Bearings	214.76
Total Project Cost to Date	214.76
Balance	***$ 9,785.24***

C. Repairs to Hurst frame. Make a drive for operation of one pair of millstones, including the necessary gear drive and tenter equipment and millstones with all the furniture, etc.

Estimated Completion Date: December, 1998 Competed June 1999

1. Hurst Frame repairs and additional material to drive one pair of millstones
Estimated cost ..... $ 50,000

Machining	175.45
Nuts and Bolts	18.50
Machining	854.00
Machined items	1,406.00
Parts	2,749.46
Lumber	6,890.09
Machining	3778.00
Drawings	2650.00
Labor	27,267.53
Total Project Cost to Date	$43,335.08
Balance	***$ 6,664.92***

2. Locate and purchase one pair of French millstones and drive spindle, etc. for working set
Estimated Cost ..... $ 12,500
Balance ***$12,500***
Millstones dressed and relocated to Pickwick Mill
Actual cost

Removal Costs from original site	$2,800
Trucking to Pickwick	$550
Balance $9,650	

3. Locate or make set of furniture for millstones
Estimated Cost ..... $ 7,500
In Process
Actual Costs

Construction and Machinists Consulting	$300
Site Visit to Mills in Missouri	350
Wood	5,122
Labor	4,000
Parts	159.37
Total Project Cost to Date	$4860.59
Balance	***$ 2639.41***

4. Repair and replace chutes and spouts for millstones
Estimated Cost . . . . . $ 5,000
Balance ***$ 5,000***
In process

D. Establish Miller's Office to closely resemble a working mill.

Estimated Completion Date: June, 1999

Repair furniture, move existing unrelated materials, acquire necessary accessories
Estimated cost . . . . . $ 13,000
Balance ***$ 13,000***
No progress

E. Produce a Mill Flow Diagram which would include the millstone operation as well as the roller mill operation (the life of the mill during it's prime). At the same time create a Machinery Plans blueprint to establish current and future machining needs.

Estimated Completion Date: October, 1997

1. Preparation of Mill Flow Diagram
Estimated Cost . . . . . $ 13,500
Initial diagrams completed. Site visits (2).
Actual Cost 3,255.76
Site Visit and Consulting 9,800.00

Balance ..... ***$ 444.24***

2. Preparation of Machinery Plans for all floors
Estimated Cost ..... **$ 14,500**
Actual Costs
Drawings and Site Visit $5,481.20

Balance ***$9,018.80***

V. DISSEMINATION: Plans for dissemination of information include advertisement in travel brochures and documents including but not limited to Bluff Country News, LaCrosse Visitor, Winona Visitor, Bluff Country Journal, Mississippian, and the Minnesota Tourism Brochure. We are members of the LaCrosse Chamber of Commerce and the Winona Chamber of Commerce which entitles us to put our brochures in each of these cities Visitor Information Booths. We have our brochures at the Dresbach Minnesota Visitor Information Booth, and various and numerous other locations for brochures including restaurants, retail shops, and visitor centers. At least once a year we celebrate Mill Day which is a family day long fund raising event which draws approximately 1000 people. We have the mill open every day except Mondays, May through October for tours and last year we had over 3,000 people tour the mill. We are listed on the guide for bus tours and each year the number of bus tours increases. Last year we had 10 bus tours and this year we have already hosted 8 tours thus far. We provide tours for school children and give at least 5 tours a year to school children. This fall we intend to personally meet with the school principals and suggest Pickwick Mill as a site for their students to see. We have each year given a tour for the Elderhostel from Winona State University. We are listed on the Winona Web site for tourist attractions. Our membership to the Mill is currently over 350 individuals and organizations, who receive our newsletter at least six times a year. We have purchased a highway sign which designates Pickwick Mill as a Historical Mill. It is located on Highway 61.

VI. CONTEXT:

A. Significance:

Pickwick Mill has been noted to be the oldest existing industrial site in the state of Minnesota. It is listed on both National and State Registers of Historical Places. It is an excellent example of the various stages of milling history including stone grinding and roller mill operation. The Mill is unique in that it contains original machinery from the various periods of milling history and indeed some of the equipment in the Mill is found no other place in the United States according to milling historians.

The project we are currently requesting funds for, helps to continue our efforts to restore the Mill to a point where visitors can experience, understand, and appreciate the efforts of our forefathers in regards to milling. Especially in Minnesota, where flour milling continues to be a vital part of the state economy this understanding seems to particularly important. The maintenance of the mill and the surrounding village provides visitors and residents with a glimpse of their heritage and history.

The Mill currently provides the visitor with a general sense of Milling and an appreciation for the changes that occurred in the Milling process. This project will allow the visitor to be even more informed regarding the period of stone grinding flour. It will give visitors an opportunity to actually see mill stones in operation driven by a water wheel, a rare experience for most individuals.

Because the project also includes drawings and blueprints for the machinery in the mill, the project helps us to move into our next stage of interpretation as well...the roller mill process.

Additionally, the Mill provides for additional funding to the area in the way of tourism and tourism related dollars. Last year alone over 3,000 people visited the Mill. The vast majority of these visitors are not local residents. Many come from the Minneapolis St. Paul area but most are from neighboring states and some from other countries. As the numbers of visitors grow each year we are certain that the Mill continues to a popular place to visit when in the area.

B. Time: The time frame for this particular project should be completed However, the overall project of becoming a Milling Interpretative Center goes within two years if we do not encounter any significant unforseen developments. The over all project however, goes beyond the two year scope of this project and will eventually include roller mill operation and limited flour production. Additional consideration must also be given to maintenance and operation of the mill i.e. a person with sufficient knowledge to run a mill on a limited basis.

C. Budget Context: see attached budget sheet.

VII. COOPERATION: This project has no other agency affiliations.

VIII. LOCATION: see attached brochure.

IX. REPORTING REQUIREMENTS: Periodic workprogram progress reports will be submitted not later than November 1997 and November 1998. A final workprogram report and associated products will be submitted by June 30, 1999 or by the completion date as set in the appropriation.