



Legislation Details (With Text)

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RIVERWALK COMMISSION AGENDA ITEM

ACTION REQUESTED:

Concur with the Planning, Design and Construction Committee and recommend Alternative #1, repair the Moser Tower in one phase as the recommended solution to the Naperville City Council

DEPARTMENT: Transportation, Engineering and Development

SUBMITTED BY: William J. Novack, Director of TED/City Engineer

BOARD/COMMISSION REVIEW:

At their February 4, 2020 meeting, the Planning, Design and Construction Committee unanimously supported Alternative #1, repair the Moser Tower in one phase.

BACKGROUND:

In the late twentieth century some local leaders desired to build a unique and significant improvement to mark the beginning of the new millennium. The Millennium Carillon Foundation (MCF) was established and started raising private funds to design and construct the tower and carillon that would be built on the Naperville Riverwalk. Originally envisioned to cost around \$3 million the MCF started construction with some generous donations, pledges and a line of credit backed by the City. As construction progressed it became apparent that the cost was much higher than \$3 million and that there were not many donors remaining. By 2000 the tower and carillon were partially constructed and operational.

After finding some broken off pieces of the tower near the base of the tower in 2006 the City stepped in to complete construction of the tower. With financial backing from the City, the MCF and City hired a different contractor to complete the tower. Some elements of the original design were not included, such as enclosing the bottom half of the tower in glass for aesthetics and to protect the elevator from

the outside elements and weather.

By 2007 the carillon and tower were completed and back in operation. The City and Naperville Park District entered into an agreement for the carillon and visitor center operations, where the City reimburses the Park District for their labor, programming and annual general maintenance of the facilities. For 2020 the City will reimburse the Park District \$106,795.

Since the Moser Tower and carillon are located on the Naperville Riverwalk they became Riverwalk assets and under the watch of the Riverwalk Commission (RWC). In 2015 the RWC decided to have a structural assessment of the tower performed so that a baseline condition could be established. With the tower only fifteen years old the RWC was surprised when the initial findings of the assessment revealed a fair amount of corroded structural steel and many cracks in the precast concrete units of the tower.

With limited information on how the tower was constructed and what exactly was causing the strains observed the RWC's consultant provided preliminary cost estimates in the \$3 to \$3.7 million range depending on whether the lower level of the tower would be enclosed or not.

News of the tower's condition prompted interest from many specialty contractors and consultants. In 2017 and 2018 the RWC consultant worked with many of these firms to perform a deeper analysis of the structure and determine the causes of the deterioration. Further structural modelling was completed in 2019 leading to the final report.

The final report includes three alternatives to address the tower:

1. Repair the tower
2. Repair the tower and enclose the lower portion of it in glass as originally designed
3. Inspect the tower and eventually take it down when it is no longer structurally safe

Each of these alternatives has a capital cost associated with it along with an annual maintenance cost as shown below

Alternative	Capital Cost	Annual Structural Maintenance Cost	Total Cost over 30 Years
Alternative #1	\$1,499,000	\$26,667	\$2,299,000
Alternative #2	\$2,418,000	\$21,667	\$3,068,000
Alternative #3	\$726,000	\$28,333	\$1,576,000

DISCUSSION:

The Planning, Design and Construction (PDC) Committee had extensive discussion about this during the last two months. The first task they handled was to look at the two alternatives to repair the tower and determine if one was preferred over the other. It was determined that simply repairing the tower (Alternative #1) was much better than repairing and enclosing it (Alternative #2) for the following reasons:

- Enclosing the tower does not weather-proof the structure from the elements since the upper half of the tower will still be outside
- Enclosing the tower has the highest initial capital cost, without any true benefit that anyone could identify

- Enclosing the tower will also have increased annual operational costs not included above since the enclosed portion will need to be ventilated

That left Alternative #1 and #3. As the pros and cons of each alternative were discussed the PDC noted that Alternative #3 resulted in many questions about how to address taking down the tower. Questions not thought of and not included in the above costs include:

1. What happens to the carillon bells donated by individuals and families?
2. Should anything be put in place after the tower is taken down to commemorate it?
3. Does the Moser statue located near the tower need to be relocated once the tower is taken down?
4. How is the issue of past donor recognition reconciled?

When looking at the total cost over the next thirty years it was noted that there is not much difference between repairing and taking the tower down, with the 30-year cost to repair and keep the tower up at \$2.3 million and the 30-year cost to take the tower at \$1.58 million.

When adding the 1999 and 2006 construction costs together the total cost to the community for the tower is over \$7 million. The PDC noted that the difference in total 30-year cost between Alternatives #1 and #3 is just \$720,000. For that incremental difference the Moser tower could continue to stand and reflect the dreams and aspirations of those who envisioned the tower as an icon for Naperville. It was interesting listening to our RWC student member who noted that he and his friends only know of the Riverwalk with the carillon tower in place; they never knew the area without it. They view it as an integral part of the Riverwalk and would be disappointed if it were taken down.

For all these reasons the PDC unanimously recommends Alternative #1, repairing the tower. In addition to supporting Alternative #1, the PDC further recommends that the tower be repaired in a single phase instead of multiple phases over several years. Single phase repair is preferred due to:

1. Single phase being lower in cost than multiple phases
2. Completing the repairs in one season reduces impact to users of the Riverwalk and the carillon
3. The single phase would involve only one contractor, eliminating the contractor from one phase blaming another phase's contractor for doing something incorrectly
4. The single phase would limit the negative public perception of how long it's taking to do the repairs.

In summary the PDC recommends Alternative #1 with a preference for a single phase of construction.