CONVENE: 6:41 p.m.

PRESENT: Chair David Shipley and Commissioners Dave Nicandri, Alex Rossiter, Renee Radcliff Sinclair, Marnie Slakey, and Don Trosper.

Staff: Parks and Recreation Director Chuck Denney, Communications Manager Ann Cook, and Parks and Facilities Manager Stan Osborn.

CHANGES TO AGENDA: There were no changes to the agenda.

APPROVAL OF MINUTES OF JULY 20, 2023: Consideration of the minutes of July 20, 2023 was deferred.

PUBLIC COMMENT: There were no public comments.

OLD BREWHOUSE TOWER PHASE 2 SEISMIC IMPROVEMENTS: Manager Cook introduced Jim Cary, Cardinal Architecture. Mr. Cary presented the final plan for seismic improvements to the old brewhouse.

Mr. Cary reported that since the last update in February, the geotechnical engineer and the structural engineer have been developing the construction drawings, which will be submitted to the City for Phase 2 of the project.

Mr. Cary displayed historic images of the old brewhouse and the original construction drawings produced in Milwaukee, Wisconsin used by the team throughout the project. The building sections reflect how brewery equipment was placed in the building. The team was able to develop a 3D model of the gravity brewing system used in the tower.

Foundation drawings assisted the team in recreating building details and how the building was used. Additional photos were of construction workers building the original roof of the brewery tower.

During Phase 1 of the project, masonry was repaired and installed and new roofs were installed. Phase 2 of the project is only for seismic improvements. The phase includes geotech exploration and input, installation of micropiles, and the addition of concrete and steel to preserve the structure during future earthquakes and seismic events.

Phase 2 efforts began with the foundation. The team worked from an historic foundation plan; however, the version was not developed in Milwaukee because it had been revised and developed onsite to accommodate the addition of 494 timber piles underneath the structure. Mr. Cary shared photographs of the crawl space. The water table is

located four feet below grade. The foundation of the tower is approximately 14 feet below the main floor of the structure. Since initial construction of the building, the crawl space has been flooded with water. To assist the team in inspecting the foundation, the City pumped all water from the crawl space. The geotech engineer, structural engineer, and several members of the team were able to access the crawl space. They discovered approximately 18 inches of mud and an understanding of how the concrete was designed and installed. The original plan called for concrete footings that spread to distribute the load to the soil. However, after initial digging discovered groundwater, the water table prohibited further digging to reach basalt bedrock At 14 feet, the maximum digging capacity was reached in 1905 necessitating a new foundation drawing to add a new piling plate comprised of 494 timber piles driven through the ground to bedrock with the piles topped with steel caps. The Milwaukee-designed concrete foundation was then poured on top of the timber pile to serve as the base for the old brewhouse.

Since the site inspection, the geotech engineer identified ways for ground forces imparted during an earthquake to be determined and measured on the building with the structural engineer using those measurements to design the amount of concrete and steel to be added to the building to mitigate seismic forces.

Mr. Cary displayed the structural engineer drawings. The construction drawings will be available within the next week for submittal to the City and to the Commission. The seismic improvements essentially build up through the foundation plan by adding new concrete structure within the crawl space, additional vertical and diagonal micropiles of steel casings filled with concrete to provide compression and tension structural support, infilling of some openings previously housing equipment, and adding an internal steel frame attached to the masonry.

Mr. Cary displayed a series of interior elevations and building section drawings reflecting the existing building and blue-colored improvements of concrete, supports in the crawl space, and new steel supports above the main floor. The addition of reinforced concrete extends up through the first floor, commonly referred to as “shock treat” to help protect the height of the first floor during seismic activity.

Mr. Cary displayed a model completed by the structural engineer during modeling to identify earthquake forces on the building. The ground remains stationary in the model with the tall first floor experiencing much movement with movement of the upper floors in unison but not to the same degree as the first floor. During masonry repairs, the team identified many areas that experienced stress during earthquake forces at the top of the building but less so in the lower elevation of the building.

Commissioner Slakey asked whether the team identified any projections in the size of seismic activity based on the Richter scale. Mr. Cary advised that engineer calculations rarely recognize the Richter scale; however, the building would be protected from earthquakes measuring in the 7.0 range. The building would remain standing based on a projected earthquake per the building code and civil engineering codes.

Commissioner Nicandri asked about the exchange of the water within the crawl space and whether the field adaptation of the foundation achieved the original Milwaukee structural desirability for the building design. Mr. Cary advised that the field design was a solution engineered with a specific number of timber piles within a specific design that were laterally connected to create a cap beneath the foundation. The design solved the gravity issue but not the translation of the wet earth to the building. The failure of the earth around the building would be solved by the design incorporating new diagonal piles. The original timber piles are assumed to hold the heavy masonry building during a seismic event. Water in the crawl space was not brackish; however, the mud was old and not fresh. He believes the foundation lacks openings to allow for tidal actions in the crawl space/basement. The water table under the building is higher than the river.

Manager Osborn inquired as to whether the shot crete within the building would cover existing wall tiles. Mr. Cary said the treatment would cover portions of the east and west walls on the first level. Installation includes the attachment of rebar to the masonry wall to create a connection to enable the transference of engineering forces with concrete sprayed onto the wall until a specific thickness is attained with final finish to follow. The treatment would cover tiles on the west wall.

Chair Shipley asked whether that specific solution has been used for other buildings. Mr. Cary responded that the options are standard seismic mitigation solutions. For masonry buildings, lateral steel is used above ground with additional reinforcement of the foundation to distribute energy forces. Chair Shipley asked whether the concrete on the first floor is intended to stabilize the wall on the first level. Mr. Cary said the intent is to stabilize the walls on the first floor and provide a transition from the steel above to the concrete below.

Commissioner Trosper conveyed disappointment for not preserving the decorative tiles on the walls because the tiles were historically important for sanitation and the brewery process. Mr. Cory advised that the documents would include salvaging and preserving the tiles to the extent possible.

Mr. Cary shared drawings for Phase 3 of the project. Future programming explored for the building was based on an analysis of the building code in terms of how much of the building could be occupied using all floors. He displayed a diagram depicting floor plans for floors 1 through 5. Usable space is highlighted along with required circulation, restrooms, and an elevator. Most of the building's space is consumed by stairs, elevator, and restrooms. A second version for building space reflects the existing brewery tower, an addition of a connecting pavilion served by terraced steps for access to the first level of the brewery tower, and connection to the concrete warehouse structure located to the east of the brewery tower. All components consuming space in the brewery tower were relocated with one staircase remaining in the brewery tower with the elevator and another staircase relocated to the outside of the building with access from the connection pavilion. The brewery tower could serve as a site for a museum. The concrete warehouse would be restored for programming space.

Commissioner Sinclair asked whether the City has ownership of the warehouse facility. Director Denney advised that the City controls only the brewery tower. However, the warehouse owner has indicated a willingness to work with the City on a joint project.

Mr. Cary confirmed that the proposed seismic improvements to the brewery tower would preserve the option of adding the connecting pavilion at some point in the future.

Manager Cook reported on next steps. The Commission is requested to forward the proposed structural design drawings to the Department of Archaeology and Historic Preservation (DAHP). If approved, the drawings would be forwarded to DAHP during the week of October 2, 2023. At the Commission's October 19, 2023 meeting, staff will request approval of a Certificate of Appropriateness based on no other changes recommended by DAHP. It is anticipated DAHP will issue a letter affirming the drawings meet the standards of the Secretary of Interior. During the week of October 23, 2023, the Certificate of Appropriateness would be submitted with the building permit application.

Staff requests the Commission forward the structural design drawings to the DAHP for its review.

MOTION: **Commissioner Nicandri moved, seconded by Commissioner Rossiter, to forward the proposed Structural Design Drawings for the Old Brewhouse Tower Phase 2 Seismic Improvements to the Department of Archaeology and Historic Preservation for review and approval. The motion carried unanimously.**

Manager Osborn asked whether the addition of the connecting pavilion located between the brewery tower and the warehouse facility would help to stabilize the structure of the brewery tower and lessen the need for some of the structural seismic improvements. Mr. Cary said the addition of the pavilion structure would be placed in a manner that does not directly connect to the brewery tower. It would be important to protect the brewery tower to avoid damaging or destroying the new structure.

Manager Cook reported on ongoing conversations with the owner of the warehouse facility and surrounding property. The owner is supportive of the proposed pavilion and repurposing the warehouse facility. The conversations included the potential of transfer of property. The owner presented a preliminary proposal for redevelopment of the site representing the most authentic and serious proposal the City has received to date for the historic property.

Commissioner Trosper asked about the timeline for completion of the project. Manager Cook advised that the completion timeline is based on the availability of funding and financing. The Council is scheduled to consider a proposal in early 2024.

OTHER BUSINESS: Commissioner Slakey requested an update on the status of the wallpaper selections for the Brewmaster's House. Manager Osborn said he recently met with the vendor. The vendor offered some recommendations based on logic. As a result, three of the ceilings will be wallpapered with the remaining ceilings to be textured. Following approval of the contract by the City's legal department, the contract will be forwarded to the City Council for approval.

NEXT MEETING DATE: The next meeting is scheduled on Thursday, October 19, 2023.

ADJOURNMENT: **Commissioner Slakey moved, seconded by Commissioner Sinclair, to adjourn the meeting at 7:33 p.m. The motion carried unanimously.**

Prepared by Valerie L. Gow, Recording Secretary/President
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