

BOARD OF WATERWORKS COMMISSIONERS - 3: 30 PM - (Monday, October 19, 2020)Generated by Joe Trueblood on Wednesday, October 21, 2020

Commissioners Present:

President Gerald Van De Kreeke, Secretary Mark Smith, Member Tom Howe:

all remote

Staff:

Superintendent Joe Trueblood, Operations Supervisor Bill Swearingen:

both remoteOthers:

Mr. Amrou Atassi, CDM Smith, remote;

Mr. David Biebel, DPW

1. OPENING OF MEETINGPresident Van De Kreeke called the meeting to order at 3: 30 PM.

1.1 Pledge of AllegianceAll present honored the flag of the United States of America.

1.2 Election of OfficersCommissioner Smith made a motion, seconded by Commissioner Howe, to nominate Gerald Van De Kreeke as President.

Commissioner Van De Kreeke made

Motion, seconded by Commissioner Howe, to nominate Commissioner Smith as Secretary.

Both motions passed unanimously and, heretofore, Commissioner Van De Kreeke is the Board President, Commissioner Smith is the Board Secretary, and Commissioner Howe is the Board member.

## 2. MINUTES

2.1 Approval of minutes from the September 21, 2020 meeting Commissioner Smith made a motion, seconded by Commissioner Van De Kreeke, to approve the minutes of the Sept. 21, 2020 meeting.

Motion passed unanimously.

Commissioner Van De Kreeke made a motion, seconded by Commissioner Smith, to move forward item 4.1 in the interest of time.

Motion carried unanimously.

## 3. REPORTS

3.1 Financial reports The Commissioners reviewed the financial reports submitted by Accountant Gottsacker.

Commissioner Smith asked about implementation of the water rate increase, and Superintendent Trueblood replied it is in effect as of October 1, 2020.

Commissioner Van De Kreeke made a motion, seconded by Commissioner Howe, to accept the financial reports as presented.

3.2 Superintendent's report including operations, construction-maintenance, and customer relations/fiscal Superintendent reviewed the monthly reports submitted by the supervisors.

Water production was up about 2 % for September compared to last year.

Various ongoing maintenance was completed in the plant.

Three water main breaks occurred and were repaired.

The year's water main projects are at or near completion.

Work is underway to prepare for the winter months.

Fewer customers are using the pay window and electronic pay submissions are up.

However, overall payments remain lower than last year due to moratorium on disconnections implemented by WI PSC due to pandemic.

Commissioner Van De Kreeke made a motion, seconded by Commissioner Smith, to accept the Superintendent's report as presented.

#### 4. ITEMS PREVIOUSLY HELD OVER FOR DISCUSSION AND POSSIBLE ACTION

4.1 Raw water improvements project Mr. Amrou Atassi was present to provide a project update at the conclusion of the preliminary design phase.

Mr. Atassi reviewed the core components of the project, including a new water intake pipeline, a new shore well, and a new low lift pumping station.

The Utility had previously acquired an easement from the City to construct and operate the raw water facility on a small shoreline parcel in Vollrath Park adjacent to the existing water treatment plant.

CDM Smith had conducted a number of meetings with Utility staff to determine needs and wants on the project.

A number of items emerged including at least 4 low lift pumps, in-building backup generators, a small chemical feed station, a robust primary intake with reduced susceptibility to icing and runoff, and a simple building layout.

Mr. Atassi briefly reviewed some site constraints including an existing 84 " storm sewer line and outfall, limited flat space due to a hillside, shoreline protection concerns, and the means to connect to existing facilities. Mr. Atassi reviewed the proposed site plan and also the building's architectural features, which take inspiration from classic design elements in the existing water treatment plant.

Mr. Atassi reviewed that the primary intake pipeline would span at least 5,000 LF into Lake Michigan, with probable bid options to go 5,500 and 6,000 LF.

Mr. Atassi also reviewed the possibility of adding an emergency or future intake pipeline along with a filter backwash connection.

The new facility would provide raw water to the existing water treatment plant but could also direct raw water to a future plant location elsewhere.

It would have a design lifetime of 100 years.

Mr. Atassi summarized contacts with regulatory agencies including the WI PSC,

WI DNR, and Corp of Army Engineers. Two meetings were also held with City staff members including Zoning, Planning, and Public Works Departments to identify any issues of concern internally.

Commissioner Smith asked questions related to the means for power upgrades if future pumps needed to be installed, the actual vertical separation between the pump motors and high Lake levels, overhead crane access, and maintenance on the traveling screens.

Mr. Atassi and Supervisor Swearingen addressed the questions.

Superintendent Trueblood reviewed some of the funding issues with the project and that the resulting preliminary design represents the culmination of input from many staff members, along with the reality of cost constraints.

A prior design layout included a number of additional elements but the estimate of probable construction cost significantly exceeded the initial project target of \$29 M.

So various changes were made to reduce costs without compromising on critical infrastructure.

Superintendent noted that the WI PSC must approve the project expenditure and current timeframes with them are estimated at 6 - 8 months for approval.

Mr. Atassi also reviewed project timelines which include the completion of final design by June 30. 2021.

This is in synch with submittal requirements for a WI Safe Drinking Water Loan.

The Utility is also considering the possibility of FEMA BRIC grant funds for all or a portion of the project, although these funds are extremely limited and competitive to secure.

President Van De Kreeke stated his support for ongoing progress on the project and looks forward to entering the final design phase.

The Commissioners thanked Mr. Atassi and Supervisor Swearingen for their information and responses.

## 5. ITEMS FOR DISCUSSION AND POSSIBLE ACTION

5.1 Review of East Basin structural analysis Superintendent stated that during routine cleaning of the east basin, Operations Supervisor Swearingen had noted additional cracking the exposed concrete structure, which dates to 1959.

Crack repairs had been made in the early 1990 's and some of these now appear to be failing.

The east basin is one of three sedimentation basins that serve as parallel pre-treatment process for raw Lake water.

The Utility had engaged R.A. Smith to complete a structural analysis and Superintendent invited Supervisor Swearingen to give a summary of the results from the analysis.

RA Smith conducted extensive surface investigation of the interior and exterior, using a color coded spray paint to resolve three types of cracking.

These markings were then shot in with a LIDAR system to provide a high level of precision in mapping the cracking and other damage to the concrete surface.

A similar technique was used on the Taylor Hill tank structure.

RA Smith then analyzed the results and provided a range of recommendations, from no-action to a high level of investment to ensure another 50 years of lifetime.

Supervisor Swearingen noted the various extent of cracks and damage, including failure of previous repaired areas, along with failure of a lining placed in the structure at least 30 years ago.

RA Smith speculated that failure of the lining was related to additional damage of the concrete.

It was also noted that air entrainment was not used in the 1959 structure.

A primary purpose of air entrainment is to increase durability of concrete and make it less susceptible to freeze-thaw stresses.

Commissioner Smith wondered if scaffolding or personal lifts would be used within the structure and the impact of either on the rehab costs.

RA Smith recommended that additional investment be made in the structure to help ensure another 25 years of working lifetime, although there is no evidence of imminent failure.

The level of investment for this option is estimated at \$505,669.

The most intensive rehab option

has a cost estimate of

\$2.1 M, which is

a large portion of the cost for a replacement, modern basin with plate settlers.

Superintendent then noted that staff wanted to provide this information to the Board and the east basin is another example of upcoming rehab investment, but the need is not urgent and can wait for a year or two.

Also, the east basin is the least successful of the three basins in pre-treating the water.

The Commissioners thanked Supervisor Swearingen for the presentation.

PSC code changes:

NONE

5.3 Approve vouchers Commissioner Smith made a motion, seconded by Commissioner Howe, to approve the September general vouchers of \$542,943.41

and gross payroll of \$158,988.72.

Motion carried unanimously.

6. PERSONNEL Superintendent noted that covid prevention efforts remain ongoing.

Due to the high level of alert out now for Sheboygan County, the pay window has been closed for the week as a precaution.

7. NEXT MEETING

7.1 Next meeting will take place on November 16, 2020 at 3: 30 PM.

8. ADJOURN

8.1 Motion to Adjourn Commissioner Smith made a motion, seconded by Commissioner Howe, to adjourn at 4: 46 PM.

Motion carried unanimously.