

**PUBLIC WORKS COMMITTEE MEETING  
WEDNESDAY, OCTOBER 30, 2019 – 6:30 P.M.  
MUNICIPAL SERVICES TRAINING ROOM  
MINUTES**

**ROLL CALL/CALL TO ORDER**

Chairman Raymond Buschmann called the meeting to order at 6:28 P.M. Aldermen Michelle Moreno and Melanie Rummel were present.

Staff in attendance included Michael Thomas, Director of Public Works; Dan Martin, Superintendent of Public Works; Bob Ells, Superintendent of Engineering; Jason Wicha, City Manager; Dan Strahan, City Engineer and Jim Lockfeer, Management Analyst

Also in attendance were representatives from Baxter & Woodman; Matt Moffitt, Water Resources Department Manager and Emily Grimm, Project Manager.

**ACTION ITEM**

**I. APPROVAL OF THE AUGUST 22, 2019 PUBLIC WORKS COMMITTEE MEETING MINUTES**

Alderman Moreno moved to approve the August 22, 2019 Public Works Committee meeting minutes. Alderman Rummel seconded the motion, which carried unanimously.

Chairman Buschmann recommended moving up the discussion of the updated Schedule Bulletin 70 and storm sewer design assumptions agenda item. Aldermen Moreno and Rummel agreed with the recommendation.

**DISCUSSION ITEM**

**II. REVIEW OF THE UPDATED SCHEDULE 70 AND STORM SEWER DESIGN ASSUMPTIONS – BAXTER & WOODMAN, DAN STRAHAN P.E. CITY ENGINEER, BOB ELLS**

Director Thomas introduced Baxter & Woodman representatives Matt Moffitt and Emily Grimm to the Committee. He explained that Baxter & Woodman had been awarded the design of the Burr Oak area storm sewer improvements. He explained that Matt and Emily were asked to attend tonight's meeting to explain the updated bulletin 70 rainfall data and its effect on the Burr Oak Area Storm Sewer Improvement Project.

Matt Moffitt and Emily Grim reviewed a presentation with the Committee on the topic. They reviewed how rainfall event size is determined and classified. They explained that rainfall events are classified based on the rainfall depth and the duration. Mr. Moffitt and Ms. Grim reviewed rainfall frequency sources. They explained that the Bulletin 70 is the industry standard data set and the recent update took a team over two years at a cost of over \$250k to complete. They explained that Lake County SMC is in the process of amending their ordinances to require the updated Bulletin 70 to be used. They explained that the counties

of Cook, DuPage, Will, Kane, and McHenry have already approved of the updated Bulletin 70.

The Committee, City staff, and the Baxter & Woodman representatives discussed the process that was undertaken to update the Bulletin 70 and Lake County's review process in amending their ordinances to align with the updated Bulletin 70.

Mr. Moffitt and Ms. Grim reviewed historical precipitation for Illinois and explained that the Bulletin 70 used data from 1948-2017. They explained that the more recent rainfall data received a heavier weight into the updated calculations. They explained that extreme precipitation events have been trending upwards and noted that in July 2017, Lake County and Lake Forest recorded an approximate 500-year storm event. They explained that in 2019, no events greater than a 2-year event were recorded.

Mr. Moffitt and Ms. Grim reviewed the below table with the Committee.

| Update of Bulletin 70 Rainfall Depths |          |                               |                               |                |                                       |
|---------------------------------------|----------|-------------------------------|-------------------------------|----------------|---------------------------------------|
| Storm Event                           | Duration | Bulletin 70 (1989) Depth [in] | Bulletin 70 (2019) Depth [in] | Percent Change | Updated Return Period for 1989 Depths |
| 2-year                                | 2-hour   | 1.79                          | 1.94                          | 8.40%          | 1.7-year                              |
| 5-year                                | 2-hour   | 2.24                          | 2.49                          | 11.20%         | 3.6-year                              |
| 10-year                               | 2-hour   | 2.64                          | 2.99                          | 13.30%         | 6.5-year                              |
| 25-year                               | 2-hour   | 3.25                          | 3.74                          | 15.10%         | 15.2-year                             |
| 50-year                               | 2-hour   | 3.82                          | 4.35                          | 13.90%         | 28.3-year                             |
| 100-year                              | 2-hour   | 4.47                          | 4.97                          | 11.20%         | 59.7-year                             |

They explained that in the past, the City has designed storm sewer improvements to the industry standard 10-year storm. The 10-year storm classification has increased capacity with the updates to the Bulletin 70.

Mr. Moffitt and Ms. Grim reviewed the preliminary proposed Burr Oak storm sewer improvements and explained that under the updated Bulletin 70, the area has capacity for a 2.5-year rain event. They reviewed the below proposed improvements and the estimated cost of \$3.4 million. They explained that the improvements would increase the areas capacity to the industry standard 10-year event.



The Committee, City staff, and the Baxter & Woodman representatives discussed the 10-year design standard and if the City should look to design infrastructure to support larger rain events. The impacts of the design to the ravine and mitigating those ravine impacts, green infrastructure, and water quality were also discussed.

The Committee asked Mr. Moffitt and Ms. Grim if they felt if a 10-year design was sufficient in meeting rain event capacity needs. Mr. Moffitt and Ms. Grim explained that their design modeling demonstrated that the 10-year design had appropriate capacity. City Engineer, Dan Strahan, explained that he had reviewed Baxter & Woodman's preliminary concept plans and that he felt the 10-year design was sufficient and appropriate. The Committee supported Baxter & Woodman's recommendation.

Chairman Buschmann explained that he read the report associated with the updated Bulletin 70. He explained that he identified specific pages from the report that he felt provided a nice overall summary of the update. He requested that City staff share those pages with the rest of the City Council.

The Committee thanked Mr. Moffitt and Ms. Grim for attending tonight's meeting.

## **ACTION ITEMS**

### **III. REVIEW AND RECOMMEND APPROVAL TO CITY COUNCIL THE UPDATED INFLOW & INFILTRATION POLICY – MICHAEL THOMAS**

Director Thomas explained that staff had again updated the Inflow & Infiltration Policy based on the Committee's discussion at the August 22, 2019 meeting. He explained that staff shared the draft policy with the City Attorney's Office for their review. He explained that the draft policy in the Committee's packet contains further updates from the City Attorney's Office. Director Thomas explained that the City Attorney's Office also prepared the applicable policy code provision document that had been shared with the Committee.

Management Analyst Jim Lockfeer explained that one of the more significant changes made to the draft policy, recommended by the City Attorney's Office, was related to the enforcement of a non-compliant private repair. He explained that under the City's current code provisions, a fine issued in violation of the code would have to be within the range of \$100 - \$750 and following the issuance of the initial fine, each day that a violation continues shall be a separate violation with an additional fine within the same range of \$100 - \$750. He explained that per the current code, the City's Public Hearing Officer would dictate the fine amount.

The Committee discussed the potential fine violation costs to the private property owner. City Manager Wicha explained that typically, Public Hearing Officers have the ability to waive some or all of the fines incurred if the issue related to the violation is corrected.

The Committee discussed the need to convey the importance of the smoke testing and I&I programs through a public educational program. The Committee and staff discussed timing related to implementing the policy, the public education program, and notifying private property owners of their issues.

The Committee and staff discussed the public repairs and how the public repairs would be packaged and bid jointly in accordance with the City's purchasing directive.

The Committee shared additional minor grammar edits with staff and requested that the policy be updated accordingly.

Director Thomas explained that the draft policy will be shared with the City Council at the November 12, 2019 Finance Committee meeting. He explained that staff would then seek City Council approval at a subsequent City Council meeting.

Chairman Buschmann recommended the policy be shared with the City Council at the November 12, 2019 Finance Committee meeting subject to the changes made to the policy at tonight's meeting. There was Committee consensus to move forward with the recommendation.

**IV. REVIEW AND RECOMMEND APPROVAL TO CITY COUNCIL THE PROPOSED IDOT JURISDICTIONAL TRANSFER DOCUMENT FOR THE DEERPATH & RTE. 41 PUMP STATION PROJECT – MICHAEL THOMAS**

Director Thomas reviewed a map of the project area. He explained that IDOT, since the very preliminary project discussions, has stated that they own the area where the proposed pump station is being constructed. He explained that upon further legal research and analysis it has been determined that IDOT does not own the land outright. He explained that the City Attorney's Office has submitted additional questions to IDOT requesting to provide further evidence that if the jurisdictional transfer were to occur that the City would be protected. He explained that IDOT is also still working to obtain an easement from Union Pacific Railroad. He explained that the construction plans have been completed and the project is ready to go out to bid, however, cannot until these issues are resolved.

The Committee and staff had discussions about IDOT's rights to transfer the property after the pump station is constructed and the City's risks in accepting the transfer. There was Committee consensus that recommendation of the transfer should not occur until the City Attorney's questions are answered.

**V. REVIEW AND RECOMMEND APPROVAL TO CITY COUNCIL AWARD OF BID FOR A RAVINE REPAIR AT SPRING LANE & MAYFLOWER ROAD – JIM LOCKEFEER**

Mr. Lockefeer reviewed a presentation on the topic. He reviewed a map of the project repair location and explained that the issue area was located south of the intersection of Spring Lane and N Mayflower Road, just north of Ferry Hall

Bridge. He reviewed the repair details and explained that the ravine bank washout was caused by stormwater overtopping the roadway curb during heavy rainfall events. He explained that this stormwater issue had been occurring due to inadequate capacity of the catch basin system conveying the water from the roadway to the bottom of the ravine. When this storm sewer is at capacity, stormwater begins to pond and will eventually overtop the curb and flow freely down this ravine bank. He explained that overtime, the flow down the ravine has caused a washout of the ravine bank. Mr. Lockfeer explained repair is needed in order to maintain the stability of the ravine bank, adjacent road, and bridge abutment. Mr. Lockfeer explained that the project was placed out to bid and reviewed the public bid process. He explained that the project was divided into two repair components; the ravine restoration and the storm sewer improvement. He explained that staff allowed contractors to bid on individual project components and were not required to submit bids for both. He reviewed the below bids received:

| <b>Firm</b>               | <b>Project Component Bid</b> | <b>Cost</b>     |
|---------------------------|------------------------------|-----------------|
| <b>North Shore Boring</b> | <b>A</b>                     | <b>\$34,710</b> |
| <b>Kinnucan</b>           | <b>B</b>                     | <b>\$45,434</b> |
| Campanella & Sons         | Both                         | \$194,500       |
| Foundation Mechanics      | Both                         | \$164,850       |
| Foundation Mechanics      | A                            | \$100,000       |
| Foundation Mechanics      | B                            | \$74,850        |

Mr. Lockfeer explained that staff recommended the award of bid to North Shore Boring in the amount of \$34,710 and Kinnucan Tree Experts in the amount of \$45,434.16 for the combined project amount of \$80,144.16. He explained that both contracting firms have previously worked in and with the City and have completed satisfactory work.

The Committee and staff discussed informing the property owner adjacent to the ravine of the repair work. Director Thomas explained that if the project is approved by City Council, staff will set up a meeting with the adjacent property owner to discuss the repair logistics.

The Committee and staff discussed grant funding opportunities for ravine repairs.

Alderman Moreno moved to recommend approval to City Council award of bid to North Shore Boring in the amount of \$34,710 and Kinnucan Tree Experts in the amount of \$45,434.16 for the combined project amount of \$80,144.16. Alderman Rummel seconded the motion, which carried unanimously.

## **DISCUSSION ITEM**

### **VI. REVIEW OF RECENT NORTHEAST ILLINOIS REGIONAL FLOOD MITIGATION MEETING – BOB ELLS**

Superintendent Ells explained that this meeting held by Highland Park related to the Planning Assistance Study (PAS) of the North Branch of Chicago River; the Middle Fork and Skokie Rivers. He explained that back in January of 2018, the City partnered with the Army Corps of Engineers, City of Highland Park, Village of Deerfield, East Skokie Drainage District and Lake County Stormwater Management Commission to conduct a Planning Assistance Study of the North Branch of Chicago River. The purpose of this study was to evaluate the watersheds of the Middle Fork and Skokie River of the North Branch of the Chicago River. He explained that it was the hope that the U.S. Army Corps of Engineers study would reveal an important need for more stormwater detention in the area. Unfortunately, the results from the U.S. Army Corps of Engineers study did not recommend moving forward to the next step in the process, a Feasibility Study. He explained that in order to move to the Feasibility Study, the Planning Assistance Study needed to demonstrate a cost benefit ratio that showed the costs of flood damages exceeding the costs to install effective detention in the area. He explained that the Planning Study concluded the costs of installing impactful detention greatly exceeded the estimated costs of continued flooding damage costs.

Superintendent Ells explained that the meeting held by Highland Park focused on the conclusion of the Planning Assistance Study and focused on next steps.

Superintendent Ells explained that now the same municipal group is requesting the Army Corp of Engineers again look at the area with a new set of parameters to develop estimated cost for flooding detention. He explained that there will be costs associated with this study and that staff is awaiting the proposal amount and what each municipal share of the proposal would be. He explained that proposal and cost information will then be shared and brought to the Committee for review.

The Committee and staff discussed possible detention areas within the City.

### **VII. PUBLIC COMMENT**

There was no public comment.

### **VIII. NEXT MEETING – TBD**

The Committee agreed that December 10, 2019 would be the next Committee meeting date.

### **IX. ADJOURNMENT**

Alderman Moreno moved to adjourn the meeting of the Public Works Committee at 9:39 P.M. Alderman Rummel seconded the motion, which carried unanimously.

Respectfully submitted,

Jim Lockefeer Jr.  
Management Analyst