

May 19, 2022

NOTICE

The undersigned, Daniel C. Shapiro, Mayor of the Village of Deerfield, pursuant to the provisions of Section 2-24 of the Municipal Code of the Village of Deerfield and 5 ILCS 120/2.2, does hereby call and give notice that the Mayor and Board of Trustees will meet as a committee of the whole at 3:00 p.m. on Tuesday, May 24, 2022 in the Council Chambers of Deerfield Village Hall.

An agenda for the committee of the whole is attached to this notice.

The village clerk is hereby directed to: (1) forthwith deliver a copy of this notice to all village trustees; (2) post a copy of this notice of said special meeting not less than 48 hours prior to said special meeting at the village hall; and (3) supply copies of this notice to any news media which has filed an annual request for such notices.



DANIEL C. SHAPIRO, Mayor

**Committee of the Whole Meeting**  
**May 24, 2022**  
**Council Chambers**  
**3:00 p.m.**

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1. Call to Order
2. Roll Call
3. Public Comment
4. Discussion of Stormwater Management and User Fee Proposal
5. Review of Capital Improvement Program
6. Discussion re: Commercial Properties Update
7. Adjournment



## Memorandum

*Public Works & Engineering Department*

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**To:** Kent S. Street-Village Manager

**From:** Robert Phillips, P.E. – Director of Public Works and Engineering

**Date:** May 24, 2022

**Subject:** Storm Water Utility Fee

The implementation of a Storm Water Utility Fee (SWUF) has been a topic of several recent Committee of the Whole (COW) meetings. During the March 15, 2022 COW meeting, the Public Works and Engineering Department presented 4 methods for calculating the fee:

- Lot Size – overall square footage of individual properties
- Water Consumption – flat rate per unit of potable water metered
- Impervious Coverage – total square footage of impervious coverage on each individual lot
- Zoning District – based upon the zoning definition of each individual lot

After presenting the most commonly used methods for calculating SWUF's in neighboring communities, the Mayor and Village Board directed staff to provide additional information regarding the Impervious Coverage method.

### **Impervious Coverage – *Equivalent Runoff Unit (ERU):***

An Equivalent Runoff Unit (ERU) is based upon the average impervious area for each category of property: residential, multi-family (based on flat fee), and commercial. A specific ERU has been developed for residential and commercial/industrial. Multi-family properties have been examined and a flat rate fee is proposed, rather than the ERU method. Multi-family and commercial properties are bound to the requirements of the Lake County Watershed Development Ordinance, thereby needing to provide significant storm water detention on site. This requirement has been in effect since 1992 and has been revised and adjusted over time to account for increasing rainfall intensities. Storm water detention facilities require a large capital investment to install and maintain, and they work to reduce the outflow intensity, thereby warranting an adjusted ERU or flat rate.

To account for all impervious area on every property within the Village, a detailed and highly accurate model has been built using the Village's Geographical Information System. This is possible through aerial imagery taken in 2021 that used Lidar imaging equipment to map the entire Village. Aerial Lidar (Light Detection and Ranging) is an aerial mapping technology that uses calibrated laser returns from the earth's surface that are reflected to an overflying GPS-monitored aircraft equipped with on-board positional sensors. After post-flight production processes, the acquired Lidar Map data determines the precise elevation and geospatial location of features on the earth's surface.

Through utilizing the GIS and aerial Lidar we have determined the average residential property within the Village has approximately 4,270 square feet of impervious coverage, the average multi-family property has approximately 65,000 square feet of impervious coverage, and the average commercial property has 28,088 square feet of impervious coverage. The average values are what surrounding communities have used to set a base rate and to establish the ERU. Therefore, the proposal is to set the base rate ERU for each category as: 1 Residential ERU =4,270 sq. ft., 1 Multi-family rate =\$5 per unit; and, 1 Commercial ERU =28,088 sq. ft.

**Expenditures:**

Maintenance of the storm sewer system is a primary responsibility of the Engineering and Sewer Divisions. As part of this responsibility, our team performs routine cleaning, repairs, and rehabilitation when necessary. Some of this work is outsourced due to scope and magnitude but still requires staff oversight and supervision. Other work, mainly rehabilitation of storm mains and laterals, is performed on the system as part of the Village’s Capital Improvement Program (CIP) that includes upgrades and repairs to storm sewer mains, inlets, catch basins, manholes, and outfalls.

Larger capital improvements are often planned for during budget discussions and are more commonly referred to as “infrastructure improvement projects”. These projects include reconstruction, capacity improvements, and addition of storm sewer infrastructure. Since this category of project typically has a higher dollar value, a 100-year lifespan, and requires in-depth planning and design, the Village has historically issued debt in the form of municipal bonds to cover the cost of engineering and implementation. Many infrastructure projects were recently identified in the 2021 Stormwater Master Plan, with an aggregate cost in the \$90 million range. It should be noted that the cost for large infrastructure projects has not been included in the rate determination for a storm water utility fee, which is discussed below. Rather the conventional method of funding these infrastructure projects is proposed to continue separately from operating and maintenance (O&M) expenditures that could potentially be funded through the SWUF.

The total O&M and rehabilitation expenditures for each of the past five years has been calculated and has been compared to the sewer revenue for each year. A shortfall in the sewer revenue has been identified and an annual average recapture value is tabulated below. The financial shortfall is the value that is proposed to be recaptured through storm water utility fees.

<b>Fiscal Year</b>	<b>Sewer Revenue, \$</b>	<b>Sewer Exp., \$</b>	<b>Eng. Exp., \$</b>	<b>CIP Exp., \$</b>	<b>Pro. Svc Exp., \$</b>	<b>Shortfall, \$</b>
2021	3,310,267	3,078,403	140,758	228,000	131,000	267,894
2020	3,137,677	3,133,105	139,977	1,105,500	340,000	1,580,905
2019	2,874,981	3,001,854	137,848	890,500	143,000	1,298,221
2018	2,917,006	2,705,784	149,516	180,000	106,000	224,294
2017	2,936,591	3,040,467	142,545	694,177	269,300	1,209,898

**Proposed Recapture, \$      916,242**

Every property generates storm water run-off and benefits from the storm water infrastructure and the Village’s effort to maintain and rehabilitate the drainage system. As shown in the table above, the proposed recapture value, or cost for O&M of the Village storm sewer system is \$916,242 annually. The residential use of the system is approximately 75% of the overall demand that is placed on sewers. The remaining 25% of the demand comes from a combination of multi-family and commercial property. Therefore, the recapture of 75%, or \$687,181, should be the responsibility of residential users. The remaining 25%, or \$229,060, should be split proportionately between multi-family and commercial users.

**Fee:**

A fee based upon the number of ERU’s for individual properties can be applied toward the monthly, or quarterly, utility bill similar to water and sanitary sewer charges. Typically, the ERU for each property is rounded to the nearest tenth, thereby ignoring minor changes, +/- 0.09 ERU’s, that may occur over time. The amount of impervious coverage on all properties should be recalculated at least every 3 years, when mapping updates are completed, and changes of impervious coverage that are greater than one tenth of and ERU can be added to individual property bills.

The rate and ERU value for surrounding communities varies. The fee is often calculated by determining a base dollar amount that is desired to be recaptured, as outlined above. Once the desired recapture value is set, the rate per ERU is determined by backing into the recapture amount. There are several surrounding communities that have adopted the ERU method. Examples of ERU’s, rates, and averages for residential property are listed below:

<b>Community</b>	<b>Residential ERU (Sq. Ft)</b>	<b>Rate, \$</b>
City of Highland Park	2,765	8.5
Village of Winnetka	3,400	21.83
Village of Lincolnshire	2,500	6.44
Village of Libertyville	3,800	13
City of Rolling Meadows	3,604	4.76
<b>Village of Deerfield (Proposed)</b>	<b>4,270</b>	<b>8.25</b>

Average ERU, Sq. Ft. 3213.8  
 Average Rate, \$ 10.906

**Residential:**

The proposed Residential ERU and Rate are:

ERU: 4,270 square feet of impervious area  
Rate: \$8.25 per month  
Approximate Annual Revenue: \$541,128

*Example: For a residential property the base ERU is 4,270 square feet and a property that has 5,280 square feet of impervious coverage would account for 1.2 ERU. If the Village selected a rate of \$8.25 per ERU, the sample property would pay \$9.90 per month for the use of the Village storm water utility.*

**Multi-family:**

The proposed Multi-family flat rate is \$5.00 per unit:

Rate: \$5.00 per unit  
Approximate Annual Revenue: \$94,400

*Example: For a multi-family property the base rate is \$5.00 per unit. The property known as Taylor Junction has 9 units and each property owner would be billed \$5.00 per month. The property known as 640 Robert York Avenue has 131 units. The property owner would be billed \$655 per month for the entire building, in theory being divided evenly between all 131 units.*

**Commercial:**

The proposed Commercial ERU and Rate are:

ERU: 86,000 square feet  
Rate: \$97 per month  
Approximate Annual Revenue: \$293,328

*Example: For a commercial property the base rate ERU is 86,000 square feet. The property located at 1650 Lake Cook Road has 178,583 square feet of impervious coverage which equals 2.1 ERU. If the Village selected a rate of \$97 per ERU the sample property would pay \$203.70 per month for the use of the Village storm water utility.*

**Recommendation:**

Staff has identified a shortfall in sewer revenues with an annual average of \$916,242. Based upon the information gathered, staff is recommending the implementation of a Storm Water Utility Fee (SWUF) to cover costs associated with the operation and maintenance of the storm sewer collection system. If approved, fees will be collected based upon Equivalent Runoff Units (ERU's) for the Residential and Commercial/Industrial categories and a \$5 /unit per month rate for multi-family. The total annual revenue proposed for the SWUF is \$928,856. Values are in draft format, if approved further refinement will be presented to the Village Board in an upcoming meeting.

Staff will be available at the May 24, 2022 meeting to discuss and answer questions.

**Reference:**

Memorandum dated March 15, 2022  
Storm water system map

Mr. Street suggested letting staff do more research on how other municipalities handle consultants, preferred lists and recouping costs.

#### 5. Discussion of Return to In-Person Meetings

Mayor Shapiro reported the Covid numbers for the Village are less than 2 percent. He believes it is important to get back to business in Village Hall and meet and collaborate in person. He asked for an overall sense from the Trustees whether to meet in person for the first meeting in April. The subsidiary commissions can meet in person or via Zoom, depending on the commission chairperson's decision as long as the Governor's declaration remains. Village Hall has a conference call feature for remote participation, but it is not a video system. If a Trustee has a risk tolerance or emergency situation, they should give staff notice so they can make appropriate accommodation. It was agreed the Trustees will meet in person starting in April, as long as the numbers stay down. The Village can go back to Zoom meetings if needed.

#### 6. Discussion of Stormwater Management and User Fee Proposal

Mr. Phillips reported many communities in the area have implemented a stormwater user fee. The communities have developed methods of determining the cost associated with use of the storm sewer system in ways that are fair and equitable across the community. Most of the communities are using one of four methods for calculating the user fee including the overall square footage of the property, square footage of impervious coverage on the property, potable water usage and a flat monthly rate.

The Village has a lot of old storm sewers and needs to review their condition to see where flooding areas are to determine where to spend capital funding. Since 2015, the Village has spent \$7 million on stormwater management improvements as well as additional costs for staff time, storm drain studies and operational expenditures. The projects outlined in the stormwater master plan are in addition to the \$1.9 million spent each year. Mr. Phillips believes a fee based on the overall lot size may be the most equitable. It is also the most streamlined way for the engineering and finance departments to administer. The quarterly bill would increase approximately \$17 for a residential property measuring 10,000 square feet and the largest business would see an increase of about \$160 per month. Mayor Shapiro questioned whether the impervious surface method would be more equitable. Mr. Phillips responded it is the most accurate way to bill; however, it would be more difficult for the finance department. Mr. Burk looked at the options and believes it will take time to set up any of the options. Certain options would be easier to implement than others and may need to be updated more frequently unless the Village uses ranges. Option three could be challenged more frequently. The Village may adjust the formula for commercial properties based on their stormwater management systems. Mayor Shapiro asked Mr. Phillips to prepare a report on impervious surface.

#### Public Comment

There were no public comments on non-agenda items.



## Memorandum

*Public Works & Engineering Department*

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**To:** Kent S. Street-Village Manager

**From:** Robert Phillips, P.E., Director of Public Works and Engineering

**Date:** May 18, 2022

**Subject:** FY 22-23 Capital Improvement Program

### **History and Description:**

The Capital Improvement Program (CIP) is a 5-year outline of Public Works/Engineering based projects that focus primarily on street, bridge, and public utility improvements. Over the past several budget cycles the Village has been fortunate enough to take advantage of a very competitive bidding environment. In 2008, the housing bust and recession that followed caused a very favorable bidding climate. Commodities such as asphalt, concrete, and steel were at an all-time low. At the same time government organizations were reluctant to build infrastructure projects due to the strained economy. The Village drew down the fund balance, issued some debt, and constructed more than \$100M in infrastructure improvements over a 12-year period, including the reconstruction of many bridges, a pedestrian underpass at Deerfield Road and the Metra rail, the reconstruction of Deerfield Road, reconstruction and replacement of many roads and water mains, and the construction of a \$30M wastewater treatment plant.

By 2020, the bidding climate began to rebound and we saw commodity prices equalizing and fewer bidders on projects due to the volume of work in the market. When the pandemic began we experienced another windfall, government agencies were again reluctant to put projects on the street. We experienced extremely low fuel prices and fewer vehicles on the road than ever before, making it easier and more efficient to build roads. The Village took advantage of this opportunity to construct more improvements, and complete important planning for future infrastructure needs.

### **Current:**

While we still have large projects on the horizon, the Village is in great shape with respect to infrastructure management and maintenance. We have reached long term goals of achieving “maintenance mode” in many areas, allowing us some breathing room with respect to initiating and constructing major capital projects. In the short-term, project costs are ranging higher than ever, a poll of local agencies between Mount Prospect and Lake Forest (south to north) and Wauconda to Highland Park (west to east) have reported price increases ranging from 13-33% higher than last year. Wastewater projects are up as much as 60%, mainly due to material cost and availability. The Village of Wauconda recently accepted a bid for a wastewater project that was estimated at \$700K, the low bid was \$1.1M.

Bituminous, steel, and fuel price indices are currently at \$692.73 (+50%), \$83.35 (+42%), and \$3.81 (+94%) respectively as compared to one year ago when they were at \$458.98, \$58.68, and \$1.96 respectively. This is the best indicator of pricing and is consistent with the bid prices we are experiencing in the region. The construction industry relies heavily upon the use of these commodities for road building and underground utility construction. The infusion of IJA projects that will hit the street in the next year will increase demand on contractors and may have a compounding effect on bid prices.

### **Federal Funding Opportunities:**

The Village has 2 applications in the queue for federal funds, including STP funds through the Lake County Council of Mayors, that are shovel ready and are well positioned to be selected. Shovel ready projects are desirable and score well when project applications are reviewed by the selection committee. Hazel Avenue and Park Avenue are particularly far along in planning and are well positioned since the Village Board authorized staff to initiate Phase I and Phase II engineering without pursuing federal funding; we have always been unique in that way and it has served us well many times in the past. However, the last call for project applications that was initiated by the Lake County Council of Mayors netted applications valuing \$100M more than is available through the Federal STP program. Therefore, outside funding is extremely competitive and is more likely to be awarded to communities that have lower household incomes, as the scoring is higher for projects in lower income communities.

Though Hazel Avenue is on the contingency list and has a good chance at being selected, we cannot count on having Federal money for the project. The CIP for 2023 is heavily contingent upon federal funds and will change radically in the absence thereof. As such, we suggest that the Village wait until the Lake County project selection committee introduces the Active and Contingency list of projects in June of 2022. Having a project listed on the Active list does not guarantee that a project will be funded, but it is unlikely that the project will be denied once it has reached that level. A copy of the Lake County Project Development Timeline is attached and as the chair of the Transportation Committee, the Village will be one of the first to learn which projects have been listed.

### **Conclusion:**

Long term, the Village should continue to invest in emergency water connections, water main improvements, WRF upgrades, and maintenance on Village streets. However, it may also be advantageous for us to consider reigning in the volume of improvements in the short term, or at least reduce the scope of work while market indices remain inflated. Consideration should also be given to reallocating resources for resurfacing projects, roadway rehabilitation, and sewer lining, as this type of construction work appears to have been slightly less impacted than others.

It is recommended that the Chemical Phosphorus upgrade to the Wastewater Treatment Plant continue its course to completion in 2022 and 2023, despite the additional cost. The Village Board will recall, the project is mandated under our new WRF operating permit that was issued by the IEPA in June of 2021.

The Waukegan Road Water main project and the Hazel Avenue project will both be ready for bidding later this year, allowing for construction in the 2023 season. However, the acceptance of bids is heavily dependent upon receiving federal funds (Hazel Avenue) and pricing/availability of material (Waukegan Road). Therefore, we should plan to evaluate whether constructing one, or both, of these projects in 2023 is in the best financial interest of the Village once funding, pricing, material availability, are determined.

Additional ARPA funding, \$1.2M, and DCEO funding related to the Woodland Park improvement, \$1.3M, are still anticipated to be received later this year. This funding source was not originally planned for in the 2022-2023 Capital Improvement Plan budget. Our past practice has been to utilize “one time” revenues to offset cost for “one time” expenditures such as large capital projects. Therefore, once the additional funding is received it may be used to offset increased project costs.

A full discussion regarding the capital program will be part of budget discussions later this year. Once outside funding sources have been clearly determined we will be able to more accurately define the course of our CIP as a whole. Staff will be available to present and discuss these concepts and answer any questions at the May 24, 2022 Committee of Whole.



# LAKE COUNTY COUNCIL OF MAYORS

## **2023-2027 STP-L Call for Projects Program Development Timeline**

- **January 31, 2022**- Call for Projects Opens
- **March 31, 2022**- STP-L Call for Projects Closes- Applications Due
- **April 1st- June 3, 2022**- Application Scoring and Ranking
- **June 23, 2022**- LCCOM Transportation Committee Meeting
  - Recommend staff developed Active and Contingency programs released for Public Comment
- **June 30, 2022**- LCCOM Full Council Meeting
  - Release of Staff Active and Contingency Programs for public comment
- **July 1, 2022** - Recommended STP-L Programs Public Comment Period Opens
- **August 1, 2022**- Recommended STP-L Programs Public Comment Period Closes
- **August 11, 2022**- Required Active Program Management Training for Project Sponsors
- **August 18, 2022**- LCCOM Transportation Committee Meeting
  - Review any public comment received
  - Recommend approval of Active and Contingency Programs to Full Council
- **August 25, 2022**- LCCOM Full Council Meeting
  - Review any public comment received
  - Approval of LCCOM STP-L FFY2023-2027 Active Program
  - Approval of LCCOM STP-L FFY2023-2024 Contingency Program
- **September 13, 2022<sup>2</sup>**- TIP Changes Due for Approved STP Program
- **September 23, 2020<sup>2</sup>**- TIP Changes Approved by CMAP Transportation Committee
- **October 12, 2022<sup>2</sup>**- MPO Policy Committee Approves new projects in TIP
- **October 14, 2022**- First Day for PPI submission to IDOT
- **October 17, 2022<sup>1</sup>**- First Day for Draft Phase II Engineering Agreements to be submitted
- **April 2023-June 2023**- First available IDOT Letting for new projects (subject to availability of funds)

1- Assumes PPI showing STP-L funding has been approved by IDOT

2- Dates subject to change